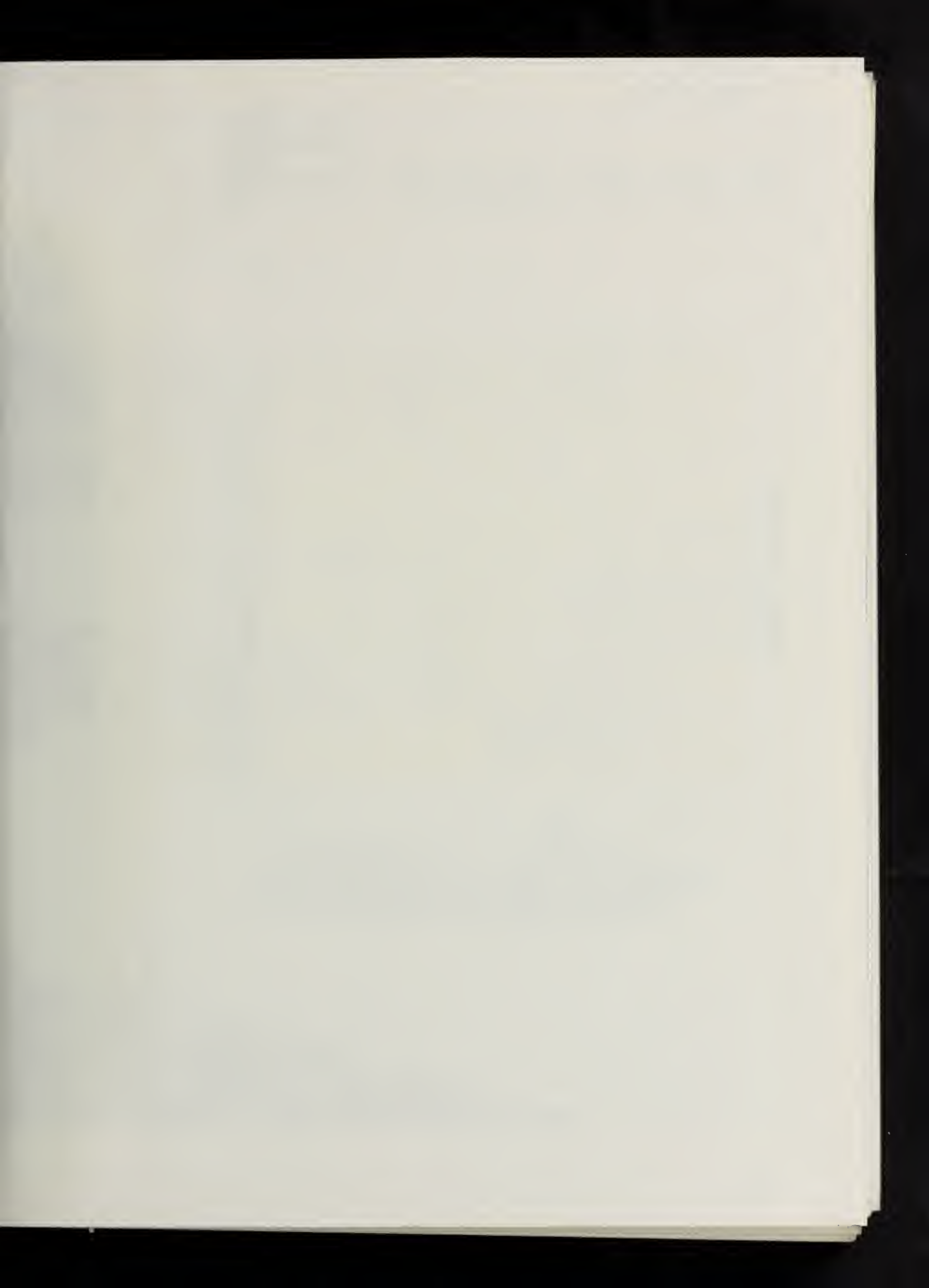
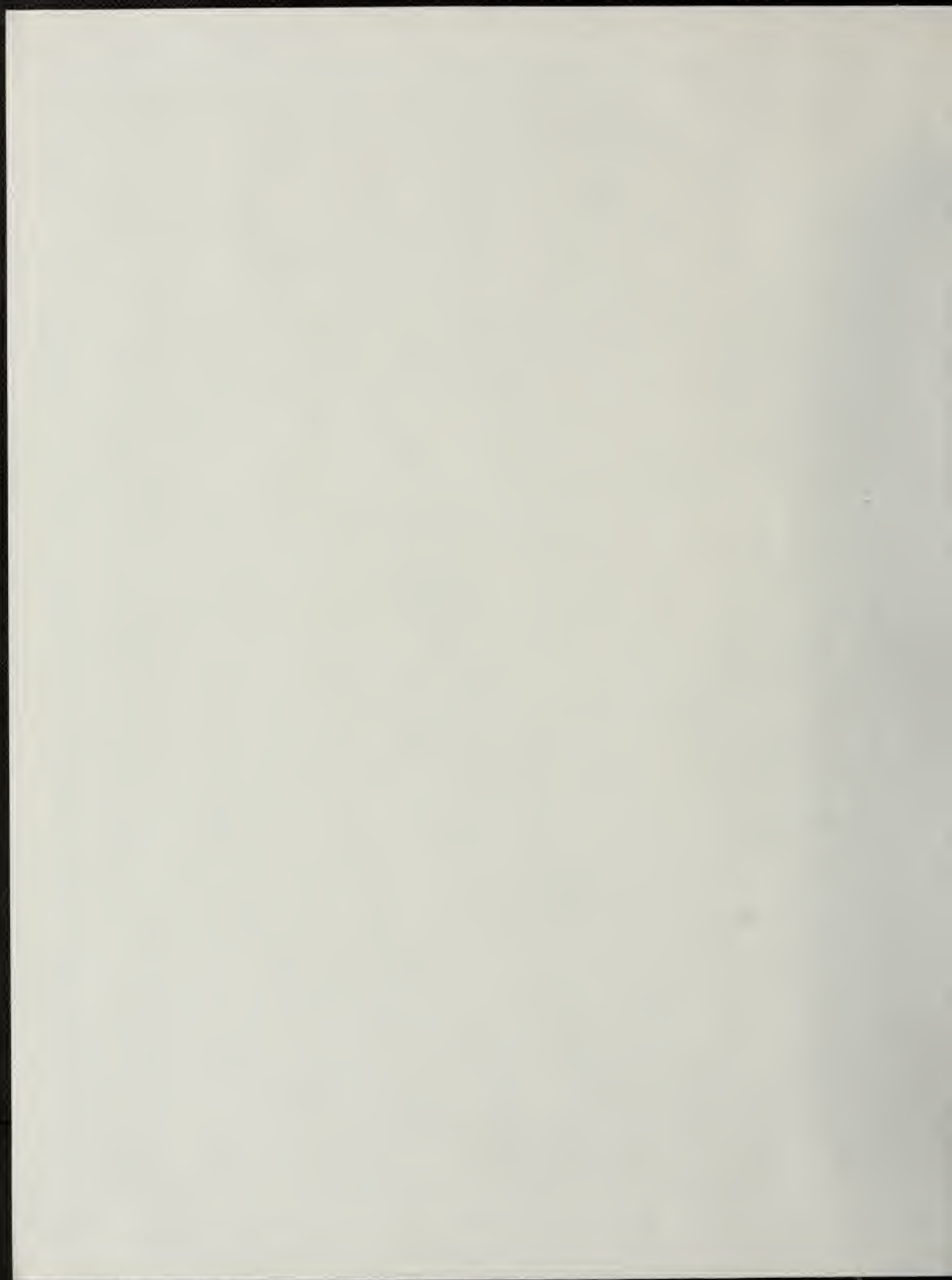


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Idaho Water Supply Outlook

094-28

February 1, 1987

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Idaho Water Supply Outlook

February 1, 1987



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Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are termed reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. Because of the limited space, snow survey measurements are not published in monthly reports. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola, Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Denver, CO 80211
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 97102
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97208
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 547, Portland, OR 97209.

Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Idaho Water Supply Outlook

and

Federal — State — Private Cooperative Snow Surveys

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Boise, Idaho

THE
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CITY OF BOSTON

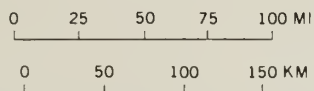
FROM THE FIRST SETTLEMENT
TO THE PRESENT TIME
BY
JOSEPH NEALE
OF THE BOSTON BAR
IN TWO VOLUMES
VOL. I.
BOSTON:
PUBLISHED BY
J. NEALE
AT THE SIGN OF THE SHIELD, IN CORNHILL.
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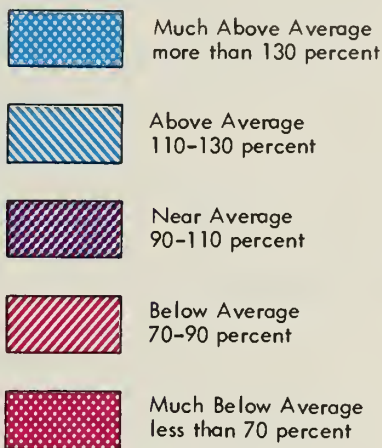
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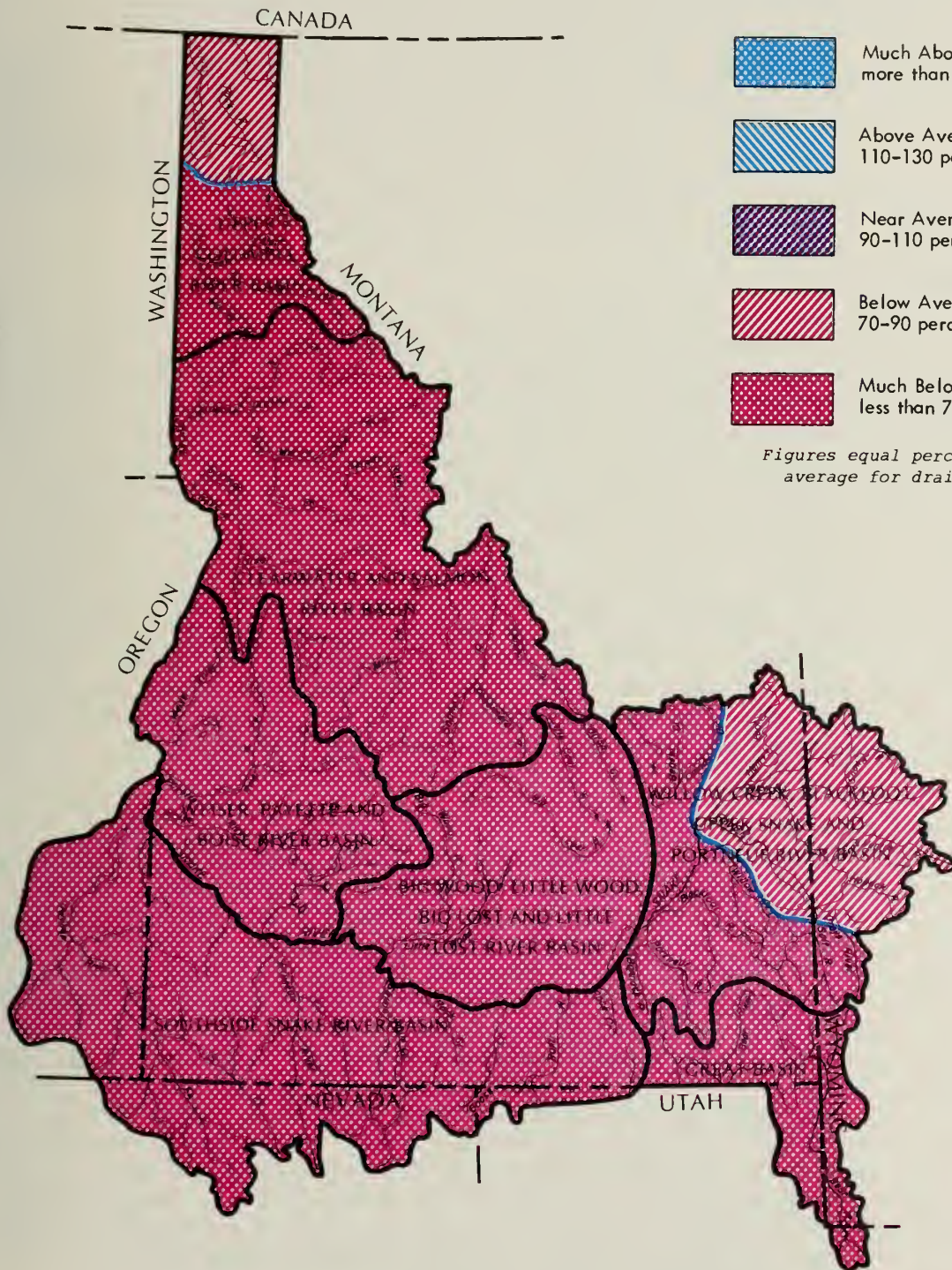
STREAMFLOW PROSPECTS IDAHO



LEGEND



Figures equal percent of average for drainage.



GENERAL OUTLOOK

SUMMARY:

IDAHO RECEIVED ONLY ABOUT HALF OF ITS NORMAL JANUARY SNOWFALL, DOING LITTLE TO IMPROVE THE BELOW AVERAGE SNOWPACKS MEASURED A MONTH AGO. FEBRUARY 1 STREAMFLOW FORECASTS FOR THE APRIL-JULY PERIOD HAVE BEEN REDUCED FROM THE JANUARY 1 PREDICTIONS TO REFLECT THE BELOW NORMAL JANUARY PRECIPITATION. WELL ABOVE NORMAL PRECIPITATION WILL BE NEEDED FOR THE REMAINDER OF THE SNOW ACCUMULATION SEASON TO PREVENT EXTREMELY LOW RUNOFF CONDITIONS ON MANY BASINS THIS SPRING AND SUMMER. GOOD RESERVOIR STORAGE ACROSS THE STATE WILL HELP OFFSET WATER SHORTAGES IN BASINS HAVING THE BENEFIT OF STORED WATER.

SNOWPACK:

February 1 snow surveys show snow accumulation during January continued to be below to well below normal over most of the state. Only a few lower elevation sites across extreme southern Idaho reported near normal increases for the month. Although precipitation was below normal for the month, most basins across southern Idaho with extremely low snowpack conditions on January 1 show a slight improvement in comparison to normal for the water year. On the other hand, northern Idaho snowpacks deteriorated slightly in comparison to normal since the 1st of January. Currently, snowpack conditions range from 65% to 72% of normal in northern Idaho, 30% to 60% of normal in the central and southern part of the state, and 50% to 65% of normal on the Upper Snake in eastern Idaho and western Wyoming.

PRECIPITATION:

Unusually dry conditions persisted into January as precipitation amounts were generally well below normal. Northern Idaho, which was the only area near normal in December, dropped to 65% to 75% of normal in January. The central portion of the state showed a wide range from just 28% of average at Salmon to 74% at Grangeville. Southwest Idaho ranged from 40% to 65% of normal while southeast Idaho varied from 60% to as high as 91% at Pocatello. The Magic Valley was the one exception this month as Twin Falls received 132% of normal. All in all January was much better than December, but precipitation was still below normal over most of the state. Temperatures were near normal in the north and southwest while southcentral and southeast Idaho were some four to five degrees below normal.

RESERVOIRS:

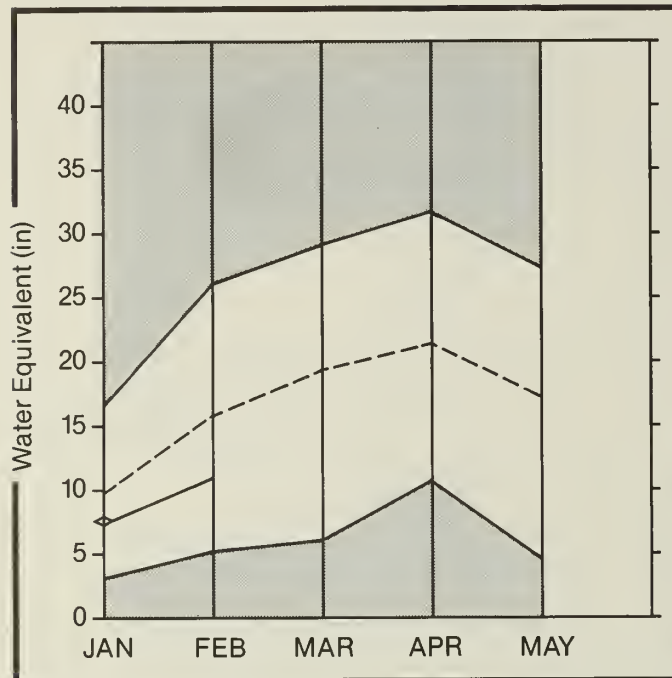
Most reservoirs in Idaho have near or above average storage at the end of January with most ranging from 80% to 130% of normal. Twenty-two major reservoirs sampled across the state report a combined storage at 108% of normal as of February 1. Several reservoirs including Pend Oreille Lake, Coeur d'Alene Lake, Lucky Peak, and Jackson Lake report well below normal contents ranging from 15% to 46% of average. Salmon Falls Reservoir reports well above average storage at 172% of normal. Most basins will rely heavily on stored water this summer to augment low natural streamflow conditions.

STREAMFLOW:

Most April-July seasonal streamflow forecasts have been reduced 5% to 15% from those published last month as a result of the below normal precipitation during January. In northern Idaho (from the Clearwater drainage north) streamflows are now expected to range from 60% to 78% of normal. Forecasts in the central, southern, and southeastern part of the state range from a low of only 35% of average for the inflow to Magic Reservoir and the Little Wood near Carey to 61% of average on the Portneuf at Topaz. April-July streamflows on the Upper Snake basin in eastern Idaho and western Wyoming are forecast to range from 69% to 73% of average. These forecasts indicate that very low streamflows will be the rule this spring and summer across central and southern Idaho. Water users are encouraged to monitor water supplies closely for the remainder of the season and be prepared to implement water conservation practices as needed. This is particularly true on basins without reservoir storage facilities.

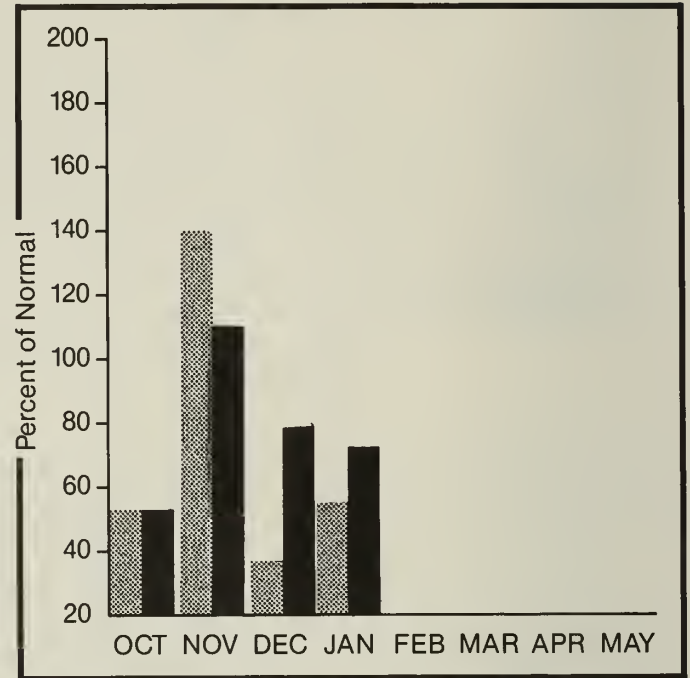
Upper Columbia Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

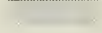
Maximum



Average



Minimum



Current



Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Snow accumulation during the month of January was below to well below the average January increase for the month. As a result, February 1 snow surveys show snowpack conditions have deteriorated in comparison to normal since January 1. Currently, snowpacks range from 69% to 72% of normal throughout the basin with the exception of the Rathdrum Creek drainage which reports 88% of normal snowpack. April-July streamflow forecasts have been reduced from the January 1 predictions and now range from 64% of normal on the Coeur d'Alene at Enaville to 78% on the Priest River at Priest. Reservoir carryover storage remains below normal in most major lakes and reservoirs.

For more information contact your local Soil Conservation Service office.

UPPER COLUMBIA RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
KOOTENAI at Leona 2	APR-SEP	8602.0	7640.0	89	9530.0	111	5750.0	67
	APR-JUL	7498.0	6660.0	89	8310.0	111	5010.0	67
	APR-JUN	6951.0	5390.0	89	6720.0	111	4060.0	67
CLARK FORK at White Horse Rapids 2	APR-SEP	13575.0	10300.0	76	14100.0	104	6500.0	48
	APR-JUL	12351.0	9390.0	76	12900.0	104	5930.0	48
	APR-JUN	10570.0	8040.0	76	11000.0	104	5080.0	48
PEND OREILLE LAKE inflow 2	APR-SEP	15150.0	11300.0	75	15500.0	102	7060.0	47
	APR-JUL	13875.0	10400.0	75	14300.0	103	6500.0	47
	APR-JUN	12010.0	9010.0	75	12400.0	103	5650.0	47
FRIEST RIVER at Priest 2	APR-SEP	885.0	690.0	78	980.0	111	400.0	45
	APR-JUL	832.0	650.0	78	925.0	111	375.0	45
SPOKANE at Post Falls 2	APR-SEP	2848.0	1680.0	59	3160.0	111	200.0	7
	APR-JUL	2754.0	1660.0	60	3090.0	112	230.0	8
ST. JOE at Calder	APR-SEP	1294.0	855.0	66	1230.0	95	480.0	37
	APR-JUL	1225.1	795.0	65	1150.0	94	440.0	36
COEUR D'ALENE at Enaville	APR-SEP	844.2	540.0	64	940.0	111	140.0	17
	APR-JUL	804.8	515.0	64	890.0	111	140.0	17

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AUG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
HUNGRY HORSE	3451.0	2402.0	2295.0	2410.0	Kootenai ab Bonners Ferry	46	105 81
FLATHEAD LAKE	1791.0	840.2	1124.0	1145.0	Pend Oreille River	125	101 72
PEND OREILLE	1561.2	212.7	755.6	831.8	Clark Fork River	86	99 69
NOXON RAPIDS	335.0	295.8	158.8	313.0	Priest River	5	101 72
COEUR D'ALENE	291.2	88.2	125.4	220.9	Bathdrum Creek	2	88 88
PRIEST LAKE	97.7	29.8	33.3	34.4	Hayden Lake	0	0 0
					Coeur d'Alene River	9	97 69
					St. Joe River	6	99 69
					Spokane River	15	98 69
					Palouse River	0	0 0

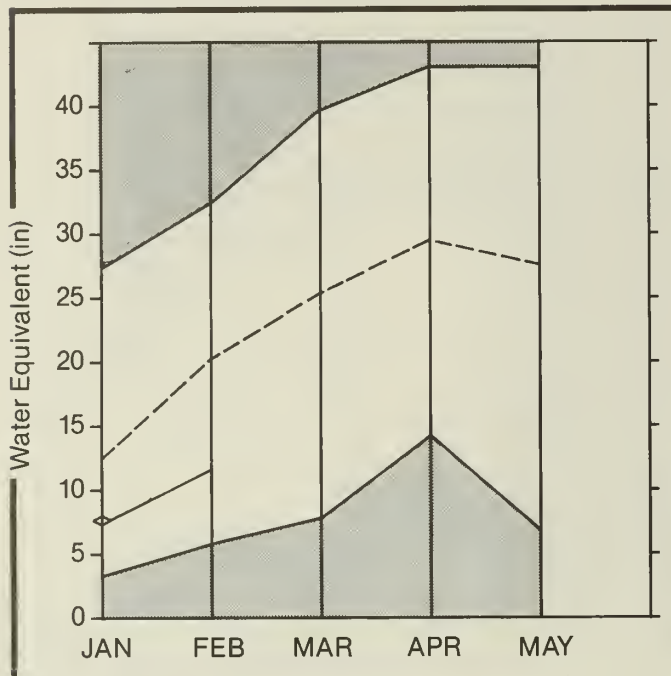
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

Clearwater and Salmon River Basin

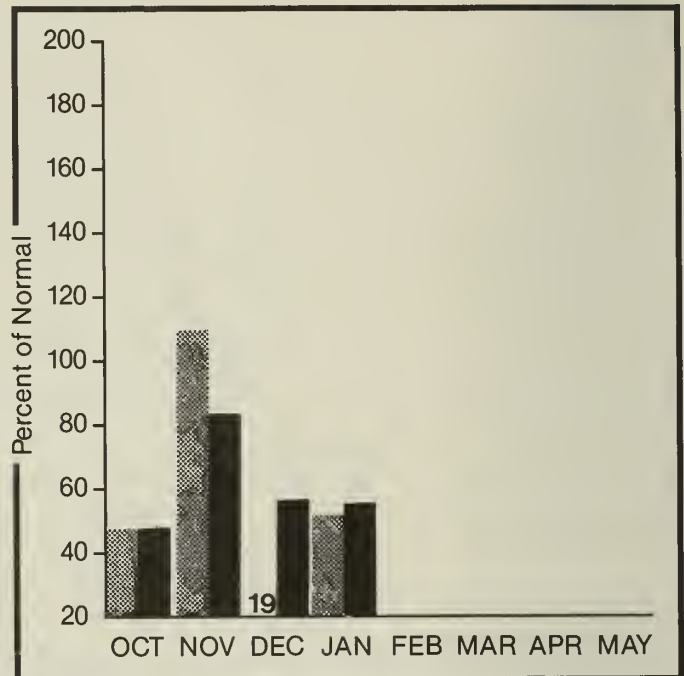
Mountain snowpack* (inches)



*Based on selected stations

Maximum ———
Minimum ———
Average - - - -
Current ◇ ———

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation [hatched bar]
Year to date precipitation [solid black bar]

WATER SUPPLY OUTLOOK:

Snow surveys taken near February 1 show little or no change in the snowpack. Conditions remain below to well below normal throughout the basin ranging from 48% of average on the Salmon River above Salmon to 71% of average on the Lochsa River drainage. April-July streamflow forecasts remain below to well below normal ranging from 58% on the Salmon at Whitebird to 65% on the Clearwater at Spalding. Carryover storage in Dworshak Reservoir is excellent at 116% of average for February 1.

For more information contact your local Soil Conservation Service office.

CLEARWATER AND SALMON RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
CLEARWATER at Orofino	APR-SEP	5185.0	3420.0	66	5290.0	102	1550.0	30
	APR-JUL	4917.0	3200.0	65	4970.0	101	1430.0	29
CLEARWATER at Spalding	APR-SEP	8460.0	5580.0	66	8800.0	104	2360.0	28
	APR-JUL	8000.0	5220.0	65	8260.0	103	2180.0	27
DWORSHAK RESERVOIR inflow	APR-SEP	2985.0	1940.0	65	3160.0	106	715.0	24
	APR-JUL	2805.0	1810.0	65	2960.0	106	660.0	24
SALMON at Whitebird	APR-SEP	6876.0	4060.0	59	6330.0	92	1790.0	26
	APR-JUL	6211.0	3600.0	58	5650.0	91	1550.0	25
SALMON at Salmon	APR-SEP	1053.0	635.0	60	1080.0	103	193.0	18
	APR-JUL	899.0	545.0	61	920.0	102	167.0	19

RESERVOIR STORAGE (1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
	THIS YEAR	LAST YEAR	AVG.				LAST YR.	AVERAGE
DWORSHAK	3467.8	2424.7	2395.9	2084.1	North Fork Clearwater	13	93	65
					Lochsa River	4	105	71
					Selway River	1	105	69
					Clearwater River	15	96	67
					Salmon River ab Salmon	7	62	51
					Lemhi River	1	90	56
					Salmon River Total	19	70	53

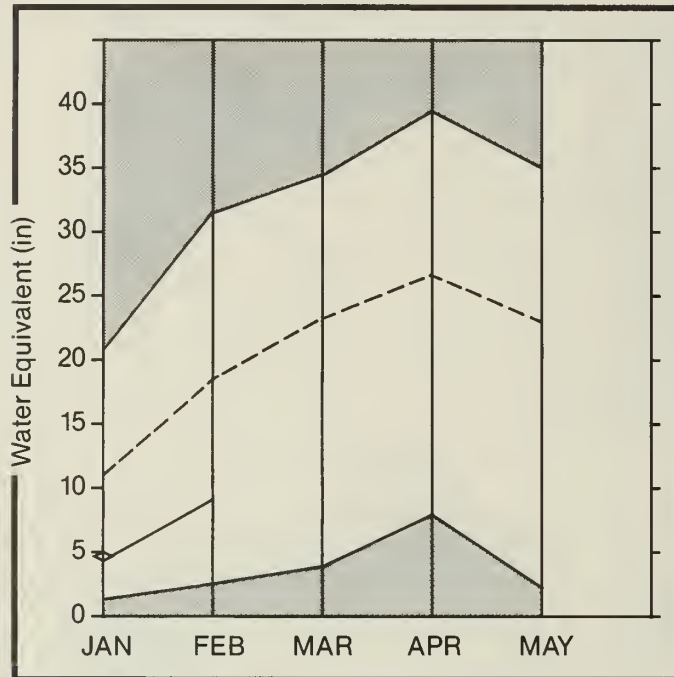
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2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

Weiser, Payette, and Boise River Basin

Mountain snowpack* (inches)



*Based on selected stations

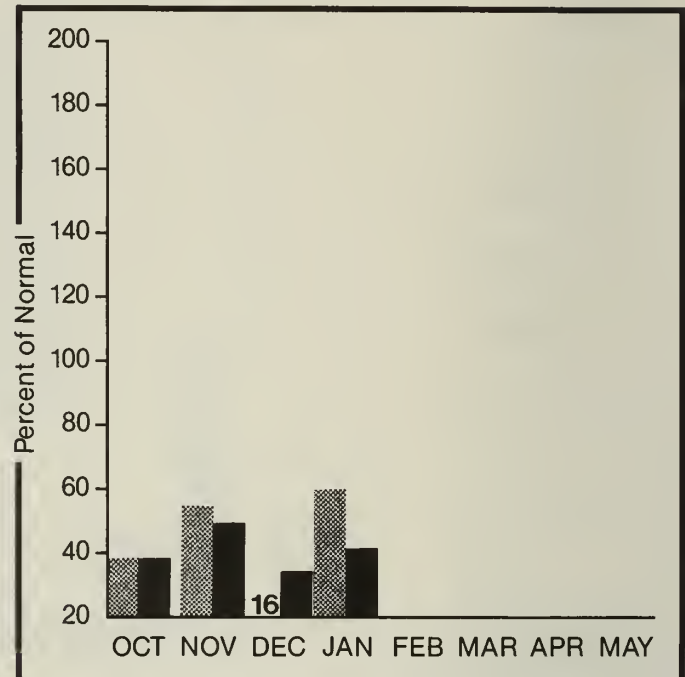
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

In comparison to normal, snowpack conditions show a slight improvement from those reported a month ago even though the January snowfall was well below normal. Basin snowpack conditions remain very low, ranging from 40% to 59% of average. April-July seasonal volume forecasts have been reduced to reflect the low precipitation during January and now range from 48% to 52%. Carry over storage is near or above normal on all major reservoirs except Lucky Peak which is reported at only 46% of normal and only 18% of capacity. Given the current snowpack conditions and the anticipated irrigation demands, the Boise Reservoir Storage system may not fill to capacity, however, adequate water supply is expected to meet users needs.

For more information contact your local Soil Conservation Service office.

WEISER, PAYETTE AND BOISE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
WEISER nr Weiser	APR-SEP	427.0	215.0	50	470.0	110	149.0	35
	APR-JUL	399.0	200.0	50	440.0	110	139.0	35
PAYETTE nr Horseshoe 2	APR-SEP	1805.0	920.0	51	1500.0	83	445.0	25
	APR-JUL	1668.0	835.0	50	1370.0	82	355.0	21
NF PAYETTE at Cascade 2	APR-SEP	553.5	295.0	53	460.0	83	130.0	23
	APR-JUL	517.9	270.0	52	425.0	82	115.0	22
NF PAYETTE nr Banks 2	APR-SEP	712.5	370.0	52	545.0	76	190.0	27
	APR-JUL	671.5	345.0	51	510.0	76	175.0	26
SF PAYETTE at Lowman	APR-SEP	497.2	255.0	51	380.0	76	130.0	26
	APR-JUL	440.6	225.0	51	335.0	76	115.0	26
DEADWOOD RESERVOIR inflow	APR-JUL	141.0	74.0	52	113.0	80	35.0	25
BOISE RIVER nr Twin Springs 1	APR-SEP	705.5	375.0	53	560.0	79	190.0	27
	APR-JUL	650.1	340.0	52	510.0	78	170.0	26
SF BOISE at Anderson Dam 1	APR-SEP	589.6	290.0	49	420.0	71	160.0	27
	APR-JUL	551.4	265.0	48	385.0	70	145.0	26
BOISE RIVER nr Boise 1	APR-SEP	1571.5	820.0	52	1355.0	86	285.0	18
	APR-JUL	1454.4	760.0	52	1255.0	86	265.0	18
	APR-JUN	1279.5	655.0	51	1090.0	85	220.0	17

RESERVOIR STORAGE (1000AF)		WATERSHED SNOWPACK ANALYSIS						
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **	THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
MANH CREEK	11.3	3.2	3.5	6.8		Manh Creek	0	0
CASCADE	703.2	465.4	465.6	393.8		Weiser River	5	75
DEADWOOD	162.0	88.0	84.9	84.5		North Fork Payette	8	75
ANDERSON RANCH	464.2	369.1	304.1	282.1		South Fork Payette	6	58
ARROWROCK	286.6	239.3	251.2	234.8		Payette River Total	13	68
LUCKY PEAK	307.0	56.7	36.0	122.5		Middle & North Fork Boise	9	52
LAKE LOWELL (DEER FLAT)	177.0	129.1	139.9	140.6		South Fork Boise River	8	46
						Boise River Total	17	51
						Canyon Creek	1	57

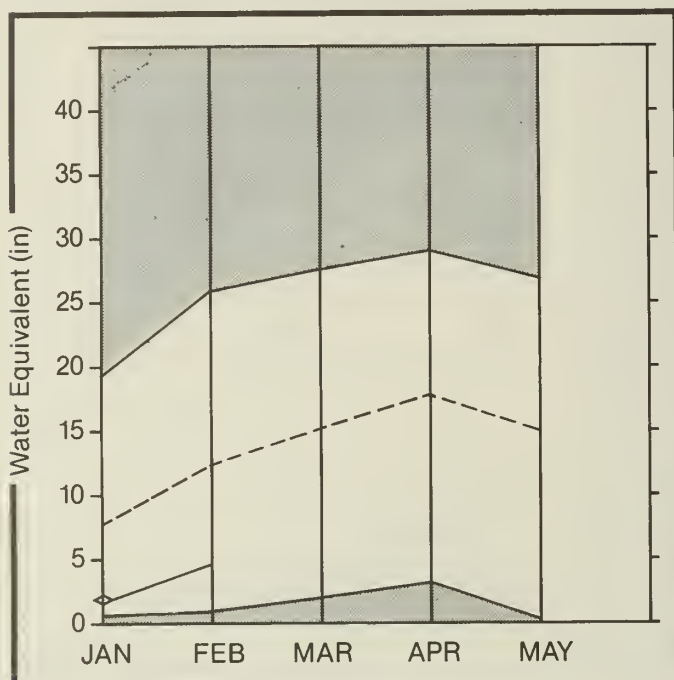
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Big Wood, Little Wood, Big Lost, and Little Lost River Basin

Mountain snowpack* (inches)

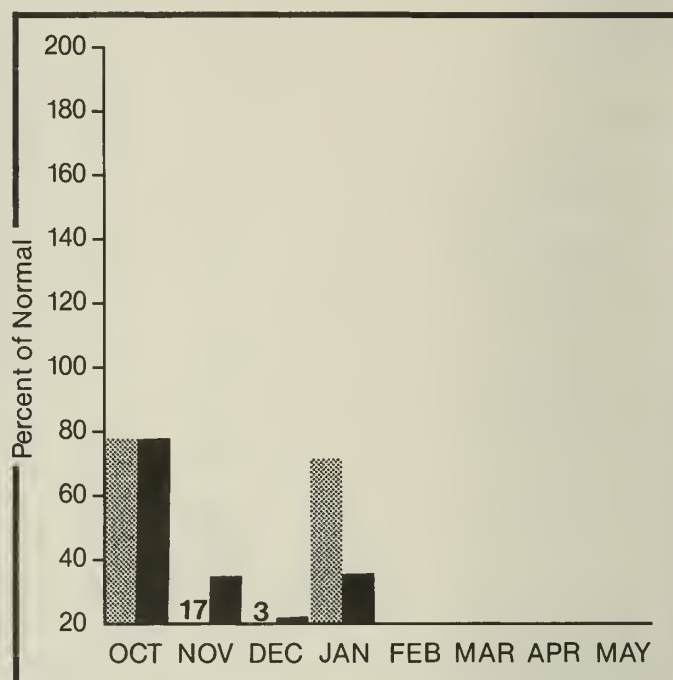


*Based on selected stations

Maximum ———
Minimum ———

Average - - - - -
Current ———

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation [hatched bar]

Year to date precipitation [solid bar]

WATER SUPPLY OUTLOOK:

February 1 snowpack conditions show some improvement from the January 1 figures but remain extremely low throughout the basin. Snowpacks now range from only 27% of normal on the Little Wood basin to 41% of normal on the main stem of the Big Wood River. Although the snowpack figures show some improvement for the water year, snow accumulation during January remained well below normal resulting in the April-July streamflow forecasts being reduced. Forecasts now range from 35% of normal on the inflow to Magic Reservoir to 53 % on the Little Lost near Howe. Reservoir carryover storage is near or above normal on most reservoirs which will help offset the anticipated low runoff conditions.

For more information contact your local Soil Conservation Service office.

BIG WOOD, LITTLE WOOD, BIG LOST AND LITTLE LOST RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BIG WOOD nr Bellevue	APR-SEP	193.4	77.0	40	164.0	85	21.0	11
	APR-JUL	179.9	72.0	40	153.0	85	16.0	9
MAGIC RESERVOIR inflow	APR-SEP	307.0	107.0	35	330.0	107	24.0	8
	APR-JUL	293.0	103.0	35	315.0	108	18.0	6
LITTLE WOOD nr Carey	APR-SEP	101.0	35.0	35	68.0	67	21.0	21
	APR-JUL	93.1	33.0	35	64.0	69	18.0	19
BIG LOST at Howell Ranch	APR-SEP	211.2	95.0	45	175.0	83	83.0	39
	APR-JUL	186.2	86.0	46	157.0	84	83.0	45
	APR-JUN	144.4	68.0	47	123.0	85	65.0	45
BIG LOST nr Mackay 2	APR-SEP	183.7	83.0	45	153.0	83	75.0	41
LITTLE LOST bl Wet Ck	APR-SEP	38.8	19.0	49	34.0	88	13.0	34
	APR-JUL	31.4	16.0	51	28.0	89	12.0	38
LITTLE LOST nr Howe	APR-SEP	42.2	22.0	52	38.0	90	10.0	24
	APR-JUL	32.6	17.3	53	29.0	89	8.0	25

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	Avg.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
MAGIC	191.5	114.5	93.4	102.4	Big Wood ab Magic	10	47	41
LITTLE WOOD	30.0	20.5	21.6	17.6	Camas Creek	3	45	35
CAREY VALLEY	14.4	6.6	4.4	---	Big Wood Total	12	46	39
MACKAY	44.4	32.8	25.3	32.6	Little Wood River	4	32	27
					Fish Creek	0	0	0
					Big Lost River	4	43	36
					Little Lost River	4	47	36

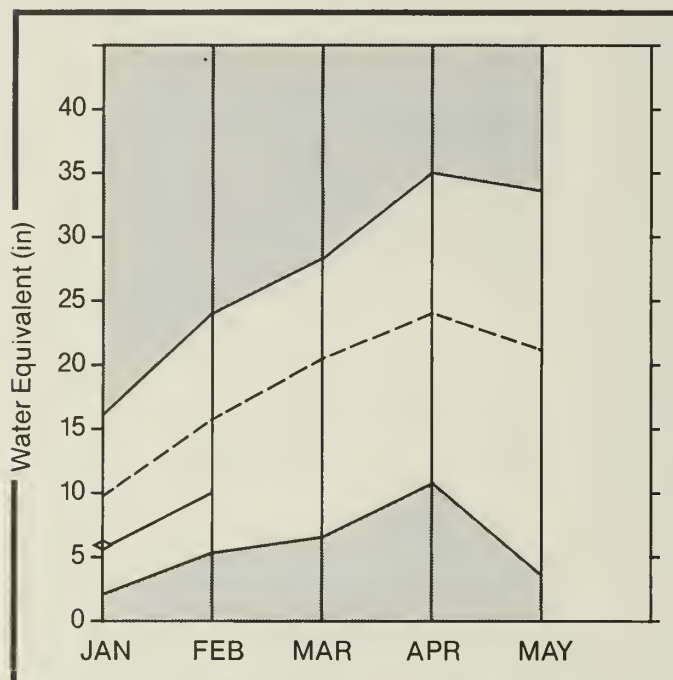
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

Willow Creek, Blackfoot, Upper Snake, and Portneuf River Basin

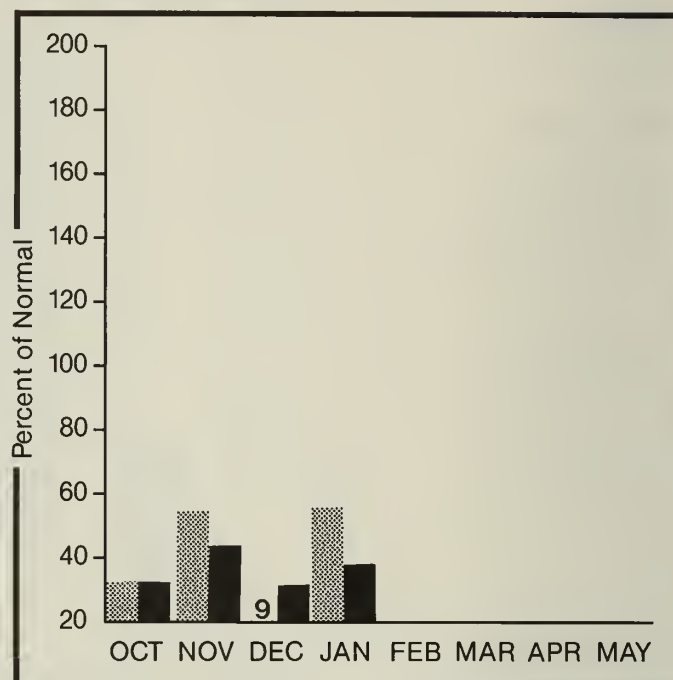
Mountain snowpack* (inches)



*Based on selected stations

Maximum ——— Average - - - - -
Minimum ——— Current ◇ ———

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation [hatched bar] Year to date precipitation [solid black bar]

WATER SUPPLY OUTLOOK:

Snowpack conditions remain generally unchanged or show slight improvement in comparison to normal from those reported January 1. Snowpacks remain well below average throughout the basin, ranging from 42% of normal on the Beaver-Camas Creek basin near Dubois to 68% on the Teton basin. One exception is in the extreme headwaters of the Gros Ventre River in Wyoming where the snowpack is 85% of normal. Although snowpack figures show some improvement for the water year, January snow accumulation was below normal resulting in the April-July forecasts being reduced from those reported a month ago. Forecasts now range from 61% of normal on the Portneuf at Topaz to 73% on the Snake at Moran. Carryover storage is good in most reservoirs which will supplement the anticipated low runoff conditions and water supplies should be adequate for most irrigators having the benefit of stored water.

For more information contact your local Soil Conservation Service office.

WILLOW CREEK, BLACKFOOT, UPPER SNAKE AND PORTNEUF RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
HENRY'S FORK nr Ashton 2	APR-SEP	714.1	510.0	71	595.0	83	425.0	60
	APR-JUL	529.1	370.0	70	435.0	82	310.0	59
HENRYS FORK nr Rexburg 2	APR-SEP	1469.0	1050.0	71	1400.0	95	695.0	47
	APR-JUL	1148.0	805.0	70	1080.0	94	530.0	46
FALLS RIVER nr Squirrel	APR-JUL	366.0	255.0	70	335.0	92	175.0	48
TETON RIVER ab S Leigh Ck	APR-SEP	193.9	138.0	71	167.0	86	109.0	56
	APR-JUL	145.0	102.0	70	124.0	86	80.0	55
TETON nr St. Anthony	APR-SEP	465.0	325.0	70	405.0	87	245.0	53
	APR-JUL	375.0	260.0	69	325.0	87	195.0	52
SNAKE at Moran 1	APR-SEP	880.0	640.0	73	835.0	95	445.0	51
PALISADES LAKE inflow 1	APR-SEP	3793.0	2650.0	70	3675.0	97	1625.0	43
SNAKE nr Heise 2	APR-SEP	4066.5	2790.0	69	3930.0	97	1650.0	41
	APR-JUL	3464.8	2400.0	69	3370.0	97	1430.0	41
SNAKE nr Blackfoot 2	APR-SEP	5537.0	3875.0	70	5150.0	93	2600.0	47
	APR-JUL	4465.0	3060.0	69	4090.0	92	2030.0	45
PORTNEUF at Topaz	MAR-SEP	102.1	61.0	60	99.0	97	23.0	23
	MAR-JUL	82.2	50.0	61	80.0	97	20.0	24

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
ISLAND PARK	127.6	108.1	96.0	110.1	Camas-Beaver Creeks	3	35	42
GRASSY LAKE	15.2	12.9	12.9	10.9	Henrys Fork River	7	57	52
JACKSON LAKE	624.4	82.6	149.4	535.9	Teton River	6	71	68
PALISADES	1357.0	1209.0	1069.9	1028.0	Snake above Palisades	31	68	66
AMERICAN FALLS	1700.0	1101.9	1103.3	1277.2	Snake above Jackson Lake	9	59	55
BROWNLEE	975.3	731.9	682.0	531.0	Gros Ventre River	3	77	84
BLACKFOOT		NO REPORT			Greys River	4	60	63
HENRY'S LAKE	90.4	79.4		79.4	Salt River	5	67	63
RIRIE	96.5	40.5		51.3	Willow Creek	10	61	63
					Blackfoot River	5	50	54
					Portneuf River	5	52	48
					Toponce Creek	0	0	0

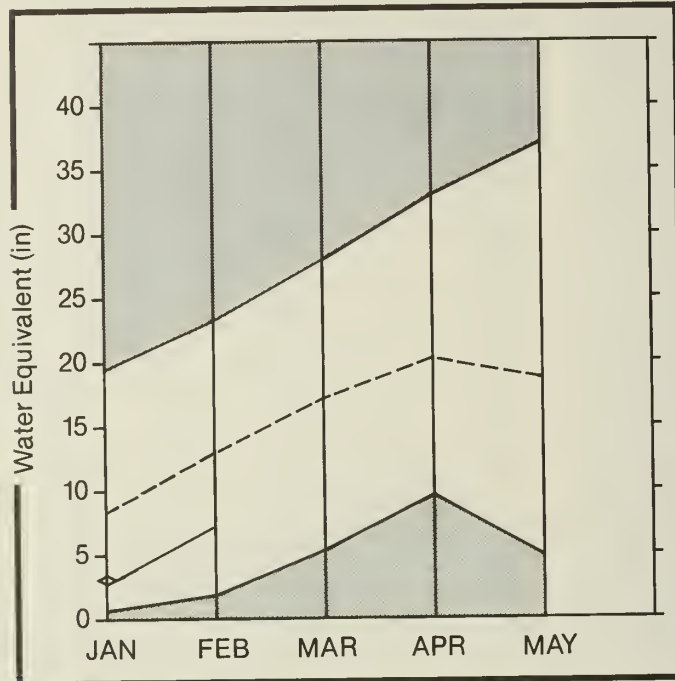
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

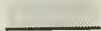
Southside Snake River Basin

Mountain snowpack* (inches)



*Based on selected stations

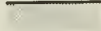
Maximum



Average



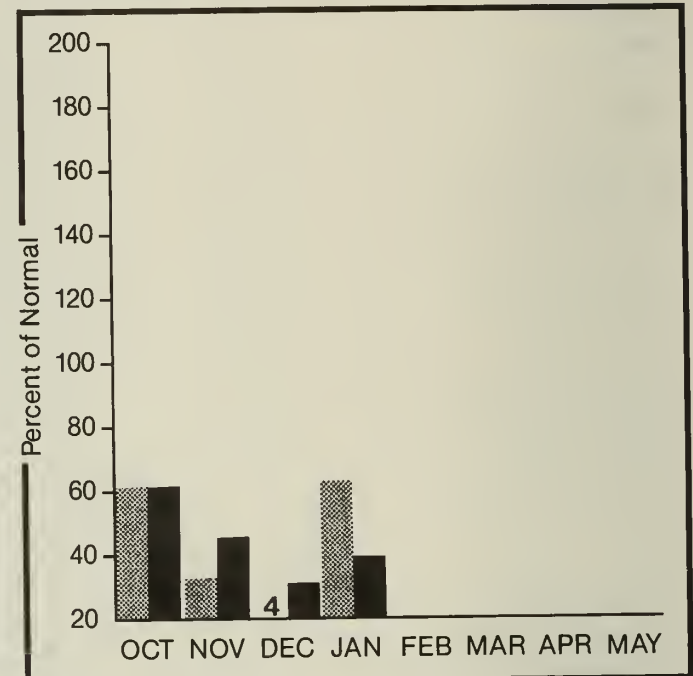
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Snow accumulation during January was generally below normal across the basin even though several low elevation stations reported near normal increases for the month. In comparison to normal, February 1 snowpack conditions show a good improvement from the extremely low figures reported a month ago. Current snowpack figures now range from 49% to 54% of average throughout the basin. Streamflow forecasts for the April-July period remain about the same or have been reduced slightly to account for the below average January precipitation. Forecasts now range from 39% to 60% with most basins in the 45% to 50% range. Carryover storage in the major reservoirs is good to excellent assuring most water users an adequate water supply for the 1987 irrigation season.

For more information contact your local Soil Conservation Service office.

SOUTHSIDE SNAKE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
OAKLEY RESERVOIR inflow	APR-SEP	30.2	14.8	49	26.0	86	14.0	46
	APR-JUL	27.2	13.1	48	23.0	85	10.0	37
SALMON FALLS CK nr San Jacinto	MAR-SEP	94.0	45.0	48	84.0	89	17.0	18
	MAR-JUL	89.3	43.0	48	81.0	91	15.0	17
	MAR-JUN	84.4	41.0	49	76.0	90	14.0	17
BRUNEAU nr Hot Spring	MAR-SEP	243.3	122.0	50	225.0	92	83.0	34
	MAR-JUL	231.5	116.0	50	215.0	93	78.0	34
OWYHEE RIVER nr Gold Creek 2	APR-JUL	30.4	12.0	39	34.0	112	3.0	10
OWYHEE RIVER nr Owyhee 2	APR-JUL	85.4	34.0	40	88.0	103	10.0	12
OWYHEE LAKE inflow 1	APR-SEP	376.0	225.0	60	415.0	110	59.0	16
	APR-JUL	349.0	210.0	60	385.0	110	46.0	13
OWYHEE at Rome 2	APR-JUL	376.0	225.0	60	410.0	109	37.0	10

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

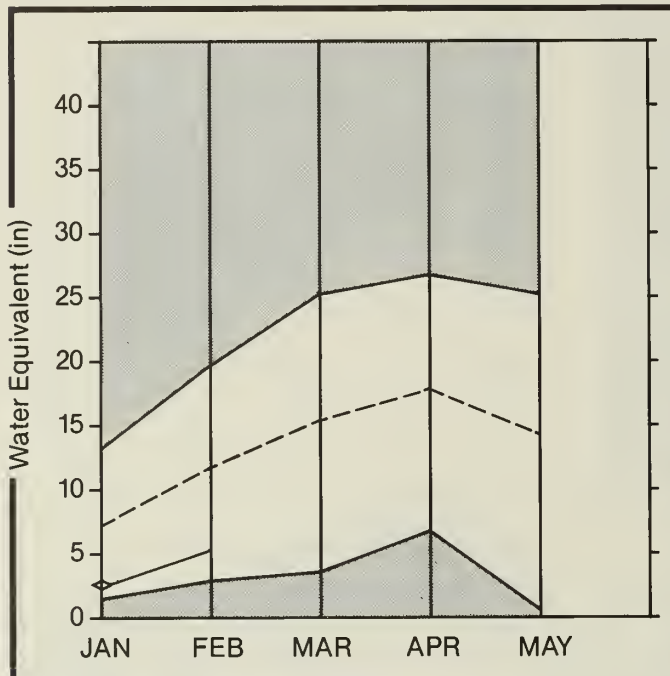
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
OAKLEY	77.4	28.4	37.1	29.9	Raft River	1	46	54
SALMON FALLS	182.6	92.9	92.8	53.9	Goose-Trapper Creeks	1	55	63
OWYHEE	715.0	488.9	470.0	443.9	Salmon Falls Creek	9	54	53
					Bruneau River	8	52	50
					Owyhee River	14	53	54

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

Great Basin

Mountain snowpack* (inches)

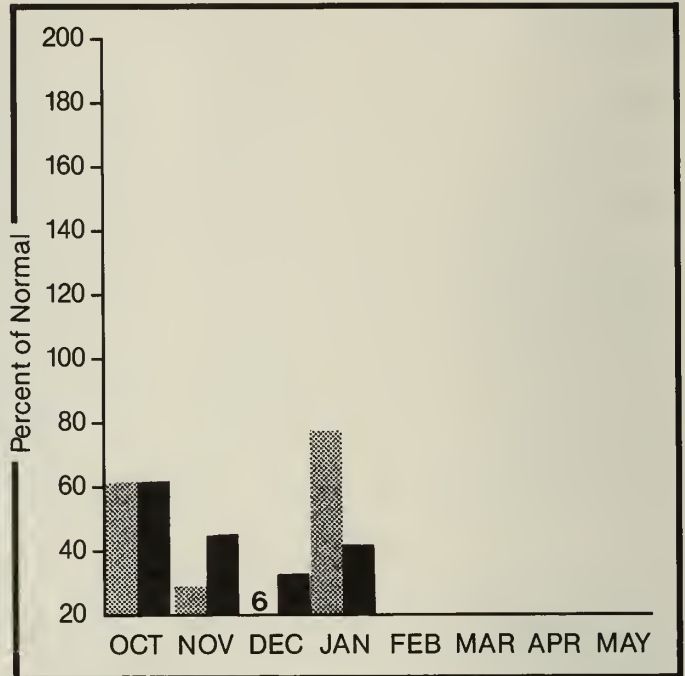


*Based on selected stations

Maximum —
Minimum —

Average - - -
Current ◊ —

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation [hatched bar]

Year to date precipitation [solid black bar]

WATER SUPPLY OUTLOOK:

February 1 snow measurements show snowpack conditions remain well below normal and about the same as reported last month. Snowpack conditions currently range from 48% to 54% of average throughout the basin. April-July seasonal streamflow volume forecasts have been reduced to reflect the below average snow accumulation during January. Forecasts now range from 45% of normal on the Bear at Harer to 60% on the Cub River near Preston. Reservoir carryover storage is slightly above normal for February 1 on Montpelier Creek and Bear Lake, assuring irrigators below these reservoirs an adequate water supply for the 1987 irrigation season.

For more information contact your local Soil Conservation Service office.

GREAT BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BEAR at Harer	APR-SEP	310.0	140.0	45	250.0	81	50.0	16
MONTPELIER CK nr Montpelier	APR-SEP	13.9	7.0	50	13.0	93	3.0	22
CUB RIVER nr Preston	APR-SEP	51.8	31.0	60	48.0	93	14.0	27
	APR-JUL	46.8	28.0	60	43.0	92	13.0	28

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY ¹	THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE	
BEAR LAKE	1421.0	1052.9	1057.7	992.5	Bear River (above Harer)	11	52	54
MONTPELIER CREEK	3.9	1.9	1.8	1.7	Montpelier Creek	6	40	48
					Mink Creek	5	44	48
					Cub River	1	52	49
					Malad River	0	0	0

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

SNOW DATA MEASUREMENTS

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
UPPER COLUMBIA BASIN							WATERSHED I						
ABOVE BURKE	4100	1/30/87	30	9.0	10.4	14.2	MOUNTAIN MOWS PILLOW	6360	2/01/87	---	10.7	8.7	18.3
ABOVE ROLANO	4350	2/01/87	---	14.1E	13.8	20.8	NEZ PERCE PASS	6570	2/01/87	---	8.0e	---	10.9
BEAR MOUNTAIN	5400	2/01/87	---	37.0E	26.3	41.5	PERREAU MEADOWS	NO REPORT					
BEAR MTN PILLOW	5400	2/01/87	---	36.4	24.8	42.6	PIERCE R.S.	3080	1/30/87	20	5.1	7.8	8.1
BELOW ROLANO	NO REPORT						REOFISH LAKE FLAT	NO REPORT					
BENTON MEADOW	2370	1/30/87	10	2.4	5.0	5.1	ROCK FLAT SUMMIT	5310	1/30/87	36	8.4	8.8	12.6
BENTON SPRING	4920	1/30/87	33	8.6	10.8	13.2	SAOOLE MOUNTAIN	7940	2/01/87	48	11.7	12.8	17.6
BREEZY SAOOLE	5010	1/27/87	53	15.2	13.7	20.6	SAVAGE PASS	6170	1/30/87	45	11.4	13.6	17.7
CHILCO RIDGE	NO REPORT						SAVAGE PASS PILLOW	6170	2/01/87	---	13.4	13.3	18.3
CONIE RIDGE	NO REPORT						SCHWARTZ LAKE	NO REPORT					
COPPER RIDGE	4820	2/01/87	---	12.8E	12.0	18.3	SECESH SUMMIT	6520	2/03/87	54	13.2	16.9	25.1
CORNER CREEK	NO REPORT						SECESH SUMMIT PILLOW	6520	2/01/87	---	12.1	16.8	25.4
EAST RAGGED SAOOLE	3740	2/02/87	43	11.8	12.9	13.9	SHANGHAI SUMMIT	4570	1/28/87	44	12.0	13.9	17.8
EAST TWIN	NO REPORT						SHANGHAI SUM PILLOW	4570	2/01/87	---	13.5	15.1	19.0
FORTY-NINE MEADOWS	4830	1/27/87	49	14.0	12.5	20.3	SHERWIN	3200	2/01/87	---	6.5E	7.6	9.8
FOURTH OF JULY SUM	3200	1/30/87	21	6.0	8.3	7.1	SHERWIN PILLOW	3200	2/01/87	---	6.4	7.4	9.5
GRANITE PEAK	NO REPORT						SQUAW MEADOW	5900	2/03/87	57	11.8	16.5	24.3
HUMBOLOT GULCH	4250	1/30/87	31	7.4	7.0	10.7	TWIN LAKES	6510	2/01/87	---	20.7e	---	26.4
HUMBOLOT GLCH PILLOW	4250	2/01/87	---	8.2	6.3	9.7	TWIN PEAKS	NO REPORT					
KELLOGG PEAK AM	5560	2/01/87	---	16.6E	17.1	22.4	VIENNA MINE	8960	1/29/87	50	11.3	23.4	25.1
LOOKOUT	5140	1/30/87	54	16.6	17.2	23.6	VIENNA MINE PILLOW	8960	2/01/87	---	11.6	20.1	25.1
LOOKOUT PILLOW	5140	2/01/87	---	17.4	15.6	23.0	WEBB CREEK	4720	1/29/87	24	6.0	5.2	7.5
LOST LAKE	6110	1/27/87	82	25.8	27.9	39.1	WEST BRANCH	5560	1/26/87	39	9.2	11.5	18.2
LOST LAKE PILLOW	6110	2/01/87	---	33.0	30.2	44.4	WEST BRANCH PILLOW	5560	2/01/87	---	10.3	12.5	18.1
LOWER SANOS CREEK	3120	2/01/87	---	8.1E	10.3	12.3	WILLIAMS CREEK SUM	NO REPORT					
MOSCOW MOUNTAIN	NO REPORT												
MOSQUITO RIDGE	5200	1/30/87	55	18.8	17.2	26.2							
MOSQUITO PILLOW	5200	2/01/87	---	19.1	16.3	26.3							
ROLANO SUMMIT	5120	2/01/87	---	19.0E	20.0	25.9							
SAGE CREEK SAOOLE	NO REPORT												
SCHWEITZER BASIN	6090	1/29/87	72	25.4	23.5	33.0							
SCHWEITZER BN PILLOW	6090	2/01/87	---	29.3	23.2	34.6							
SCHWEITZER BOWL	4800	1/29/87	53	15.3	12.7	21.4							
SCHWEITZER RIDGE	6200	1/29/87	69	24.1	23.3	32.2							
SHERWIN	3200	2/01/87	---	6.5E	7.6	9.8							
SHERWIN PILLOW	3200	2/01/87	---	6.4	7.4	9.5							
SKITWISH RIDGE	NO REPORT												
SMITH CREEK	NO REPORT												
SUNSET	5540	1/29/87	46	14.1	12.4	22.8							
SUNSET PILLOW	5540	2/01/87	---	18.3	15.6	24.3							
TWIN SPIRIT DIVIOE	3480	2/02/87	34	8.5	10.2	9.1							
WEST TWIN	NO REPORT												
CLEARWATER AND SALMON BASINS							WATERSHED II						
ABOVE GILMORE	NO REPORT						ATLANTA SUMMIT	7600	1/29/87	46	10.7	21.3	24.2
ASPEN-HALL PASS AM	NO REPORT						ATLANTA SUM PILLOW	7580	2/01/87	---	11.3	18.8	21.6
BANNER SUMMIT	7040	2/01/87	---	11.6E	16.0	21.7	ATLANTA TOWNSITE	5370	1/29/87	21	4.7	7.4	---
BANNER SUMMIT PILLOW	7040	2/01/87	---	9.6	16.1	19.4	BANNER SUMMIT	7040	2/01/87	---	11.6E	16.0	21.7
BEAR BASIN	5350	2/01/87	---	6.3E	9.5	13.5	BANNER SUMMIT PILLOW	7040	2/01/87	---	9.6	16.1	19.4
BEAR BASIN PILLOW	5350	2/01/87	---	5.9	8.5	13.4	BAO BEAR	4940	1/29/87	24	5.7	8.1	10.5
BIG CREEK SUMMIT	6580	2/01/87	---	15.9E	24.5	25.4	BEAR BASIN	5350	2/01/87	---	6.3E	9.5	13.5
BIG CREEK SUM PILLOW	6580	2/01/87	---	13.8	21.0	22.0	BEAR BASIN PILLOW	5350	2/01/87	---	5.9	8.5	13.4
BORAH	NO REPORT						BEAR SAOOLE	6180	2/01/87	---	10.5E	---	21.6
BOULDER CREEK	5440	1/26/87	37	8.0	11.0	16.6	BENNETT MOUNTAIN	6560	2/01/87	---	6.0E	10.6	12.9
BREEZY SAOOLE	5010	1/27/87	53	15.2	13.7	20.6	BENNETT MTN PILLOW	6560	2/01/87	---	5.8	---	13.6
BRUNDAGE MOUNTAIN	NO REPORT						BIG CREEK SUMMIT	6580	2/01/87	---	15.9E	24.5	25.4
BRUNO CREEK	NO REPORT						BIG CREEK SUM PILLOW	6580	2/01/87	---	13.8	21.0	22.0
BUCK MEADOWS	NO REPORT						BIGUS BASIN	6340	1/29/87	28	6.2	12.2	16.7
CAYUSE AIRSTRIP	3500	1/27/87	25	5.6	7.1	8.8	BOGUS BASIN ROAD	5540	1/29/87	10	2.0	2.6	5.9
COOL CREEK	6250	1/27/87	74	21.4	22.8	36.6	BOULDER CREEK	5440	1/26/87	37	8.0	11.0	16.6
COOL CREEK PILLOW	6280	2/01/87	---	23.3	22.1	34.4	BRUNDAGE MOUNTAIN	NO REPORT					
COOLWATER MOUNTAIN	NO REPORT						BRUNDAGE RESV PILLOW	4500	2/01/87	---	11.1	---	---
COPIES CAMP	NO REPORT						CANAS CREEK DIVIOE	NO REPORT					
CRATER MEADOWS	5960	1/28/87	67	19.2	21.4	30.2	CHIMNEY CREEK	NO REPORT					
CRATER MOWS PILLOW	5960	2/01/87	---	21.5	20.5	31.6	COUCH SUMMIT	6840	1/30/87	23	4.1	9.3	13.2
CROOKED FORK	3610	1/30/87	25	7.0	7.4	9.9	COZY COVE	5380	1/29/87	22	5.6	9.1	11.9
DEAGWOOD SUMMIT	6860	1/29/87	56	14.6	25.7	32.2	COZY COVE PILLOW	5380	2/01/87	---	5.8	10.4	17.9
DEAGWOOD SUM PILLOW	6860	2/01/87	---	15.4	21.3	35.5	CRAWFORD R.S.	4860	1/30/87	9	3.0	---	6.3
DOUBLE SPGS PASS AM	NO REPORT						DEAGHAN GULCH	5600	1/30/87	24	5.8	8.9	12.5
ELK BUTTE	5550	1/27/87	51	13.0	19.0	25.5	DEAGWOOD AIRSTRIP	5360	2/01/87	---	5.9E	---	11.2
ELK BUTTE PILLOW	5550	2/01/87	---	17.9	18.2	28.7	DEAGWOOD SUMMIT	6860	1/29/87	56	14.6	25.7	32.2
FISH LAKE AIRSTRIP	5650	1/27/87	65	18.5	17.7	27.0	DEAGWOOD SUM PILLOW	6860	2/01/87	---	15.4	21.3	35.5
FORTY-NINE MEADOWS	4830	1/27/87	49	14.0	12.5	20.3	DOLLARHIDE SUMMIT	8420	1/29/87	32	6.1	16.9	17.2
GALENA SUMMIT	8780	1/30/87	34	7.0	13.0	16.4	DOLLARHIDE SM PILLOW	8420	2/01/87	---	7.6	16.0	17.5
GALENA SUMMIT PILLOW	8780	2/01/87	---	6.5	12.7	13.2	GRAHAM GUARO STATION	5690	1/29/87	26	5.7	9.7	11.6
GIBBONS PASS	7100	2/01/87	43	10.1	11.2	16.0	GRAHAM G.S. PILLOW	5690	2/01/87	---	6.3	8.5	12.2
GOAT LAKE	NO REPORT						IDAHO CITY TOWNSITE	4000	1/29/87	9	1.8	3.8	4.3
GRANITE PEAK	NO REPORT						JACKSON PEAK	7070	1/29/87	39	9.4	19.2	22.4
HALL CREEK	NO REPORT						JACKSON PEAK PILLOW	7070	2/01/87	---	11.1	---	20.9
HEMLOCK BUTTE	5810	1/27/87	65	19.2	21.7	34.0	LAKE FORK	5290	2/03/87	43	10.0	10.6	11.8
HEMLOCK BUTTE PILLOW	5810	2/01/87	---	21.9	26.5	33.3	LITTLE CAMAS FLAT	NO REPORT					
HOOO00 BASIN	6050	1/31/87	84	26.6	26.2	34.6	MANN CREEK	NO REPORT					
HOOO00 CREEK	5900	1/31/87	75	23.0	20.6	31.7	MOORES CREEK SUMMIT	6100	1/29/87	44	11.0	20.2	22.6
KIT CARSON PASTURE	NO REPORT						MOORES CK SUM PILLOW	6100	2/01/87	---	10.7	23.4	22.9
LEATHERMAN PASS	NO REPORT						PLACER CREEK	NO REPORT					
LEMHI PASS	7480	2/01/87	---	4.0e	---	5.5	POISON LAKE	NO REPORT					
LEMHI RIDGE	8100	2/01/87	---	4.7e	---	6.5	PRAIRIE	4800	1/29/87	11	2.5	4.8	4.9
LOLO PASS	5240	2/03/87	63	16.4	12.0	20.6	ROAD CREEK	4800	2/01/87	---	2.5	---	---
LOLO PASS PILLOW	5240	2/01/87	---	14.4	14.4	22.2	RO						

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
BIG WOOD, LITTLE WOOD, BIG LOST AND LITTLE LOST BASINS							WATERSHED IV						
BEAR CANYON	7900	2/01/87	---	3.6E	9.8	12.4	ISLAND PARK PILLW	6290	2/01/87	---	6.3	18.2	11.5
BEAR CANYON PILLW	7900	2/01/87	---	3.0	8.6	11.4	JACKPINE CREEK	7350	1/29/87	37	8.6	--	15.2
BENNETT MOUNTAIN	6560	2/01/87	---	6.0E	10.6	12.9	JOHNSON CREEK		NO REPORT				
BENNETT MTN PILLW	6560	2/01/87	---	5.8	--	13.6	KILGORE	6320	1/30/87	21	3.7	7.8	8.2
CAMAS CREEK DIVIOE		NO REPORT					LATHAM SPRINGS		NO REPORT				
CHIMNEY CREEK		NO REPORT					LAVA CREEK	7350	1/29/87	33	6.8	11.5	10.1
COPPER BASIN	7640	2/01/87	---	1.4E	5.5	6.3	LEWIS LAKE DIVIOE	7850	1/28/87	54	14.0	27.4	28.0
COUCH SUMMIT	6840	1/30/87	23	4.1	9.3	13.2	LOWER PEBBLE	5780	1/28/87	20	4.0	10.0	9.3
ODLLARHIDE SUMMIT	8420	1/29/87	32	6.1	16.9	17.2	LUCKY DOG		NO REPORT				
ODLLARHIDE SM PILLW	8420	2/01/87	---	7.6	16.0	17.5	MAOISON PLATEAU	7750	2/01/87	---	10.4E	--	14.4
ORY FORK		NO REPORT					MC RENOLDS RESERVOIR	6720	1/29/87	32	6.8	11.0	13.1
FAIRVIEW G.S.		NO REPORT					MINK CREEK	6410	1/28/87	26	6.8	13.7	12.4
FISHPOLE LAKE		NO REPORT					MORAN	6750	1/30/87	32	7.3	9.2	9.4
GALENA	7440	2/01/87	---	6.1E	11.6	13.7	MUO CREEK	7100	1/29/87	40	9.8	13.3	13.3
GALENA PILLW	7440	2/01/87	---	6.6	11.4	13.5	NORTH PUTNAM	7240	1/29/87	37	9.1	14.6	20.5
GALENA NEW	7470	1/30/87	33	6.3	12.6	15.2	PACKSAOOLE SPRING	8200	1/29/87	44	10.8	19.1	19.0
GALENA SUMMIT	8780	1/30/87	34	7.0	13.0	16.4	PEBBLE CREEK	6550	1/28/87	21	4.5	9.5	11.5
GALENA SUMMIT PILLW	8780	2/01/87	---	6.5	12.7	13.2	PHILLIPS BENCH	8200	1/30/87	58	14.8	20.4	21.2
GARFIELD R.S.	6560	1/29/87	12	1.9	7.1	7.4	PHILLIPS BENCH PILL.	8200	2/01/87	---	12.8	19.5	19.4
GARFIELD R.S. PILLW	6560	2/01/87	---	2.1	7.2	7.3	PINE CREEK PASS	6810	1/29/87	33	7.7	10.7	11.6
GRAHAM RANCH	6270	1/30/87	23	3.6	8.6	10.0	POISON MEADOWS	8500	1/29/87	55	11.4	20.8	20.3
HILTS CREEK	8000	1/27/87	12	2.5	7.3	7.7	PUTNAM		NO REPORT				
HILTS CREEK PILLW	8000	2/01/87	---	3.9	6.2	8.9	SALT RIVER SUMMIT	7700	1/29/87	32	5.4	10.0	11.0
HYNOMAN CREEK	7440	2/01/87	---	3.5E	9.4	10.0	SALT RIVER PILLW	7700	2/01/87	---	5.2	9.2	10.9
HYNOMAN PILLW	7440	2/01/87	---	3.2	8.1	8.7	SAWTELL MOUNTAIN	8720	1/28/87	44	11.5	24.4	23.0
IRON BOG		NO REPORT					SEGEWICK PEAK		NO REPORT				
IRON MINE CREEK		NO REPORT					SHEEP MOUNTAIN	6570	1/29/87	24	5.0	8.4	9.2
LEAOBELT		NO REPORT					SHEEP MTN PILLW	6570	2/01/87	---	5.6	10.0	10.1
LEATHERMAN PASS		NO REPORT					SLUG CREEK DIVIOE	7230	1/28/87	27	5.8	11.5	11.3
LITTLE CAMAS FLAT		NO REPORT					SLUG CK OVD PILLW	7230	2/01/87	---	5.4	13.2	12.9
LOST GARFIELD		NO REPORT					SNAKE RIVER STATION	6920	1/28/87	39	8.1	13.1	14.4
LOST-WOOD DIVIOE	7900	2/01/87	---	6.8E	13.4	16.0	SNOW KING MTN	7660	1/29/87	36	7.6	11.4	10.3
LOST-WOOD DVD PILLW	7900	2/01/87	---	6.2	12.8	16.1	SOMSEN RANCH	6840	1/27/87	27	5.6	11.2	10.1
MASCOT MINE	7780	2/01/87	---	3.8E	8.2	10.6	SOMSEN RANCH PILLW	6800	2/01/87	---	4.8	10.6	9.3
MOONSHINE	7440	1/28/87	18	2.9	5.0	7.3	SPRING CRK. PILLW	9000	2/01/87	---	12.8	20.3	16.2
MOONSHINE PILLW	7440	2/01/87	---	4.5	6.2	7.5	STATE LINE	6660	1/29/87	35	7.4	9.3	9.9
MDUNT BALOY	8920	1/30/87	31	5.9	12.5	14.5	SULPHUR PEAK		NO REPORT				
MULODON	6320	1/29/87	12	1.7	4.4	5.6	TARGHEE PASS	6980	2/01/87	---	5.4E	7.8	10.1
SAWMILL CANYON	7000	1/28/87	18	3.4	4.2	5.7	TETON PASS W.S.	7740	2/02/87	56	15.2	17.2	17.5
SOLOIER R.S.	5740	1/31/87	15	2.5	8.1	9.5	TEX CREEK	6650	2/01/87	---	3.6E	7.1	6.2
SOLOIER R.S. PILLW	4330	2/01/87	---	3.3	--	--	THUMB DIVIOE	7980	1/29/87	35	7.3	13.4	14.0
STICKNEY MILL	7430	2/01/87	---	2.7E	5.0	6.0	TOGWOTEE PASS	9580	1/30/87	61	17.9	19.4	19.8
STICKNEY MILL PILLW	7430	2/01/87	---	2.1	4.3	5.4	TOGWOTEE PASS PILLW	9580	2/01/87	---	15.2	17.0	17.0
SWEDE PEAK	7640	1/29/87	18	2.7	9.6	11.9	TDPONCE		NO REPORT				
SWEDE PEAK PILLW	7640	2/01/87	---	2.9	9.5	10.2	TURPIN MEADOWS	6900	1/30/87	28	6.3	6.9	7.7
TELFER RANCH		NO REPORT					TWITCHELL CANYON	6300	1/29/87	30	7.1	--	11.0
VIENNA MINE	8960	1/29/87	50	11.3	23.4	25.1	TWO OCEAN PLATEAU AM		NO REPORT				
VIENNA MINE PILLW	8960	2/01/87	---	11.6	20.1	25.1	TWO OCEAN PILLW	9160	2/01/87	---	13.9	18.4	19.9
WET CREEK SUMMIT	7680	1/27/87	10	1.5	5.2	7.8	VALLEY VIEW	6680	1/28/87	29	5.9	8.6	11.4
WILLOW, BLACKFOOT, UPPER SNAKE AND PORTNEUF BASINS							WATERSHED V						
AFTON RANGER STATION	6240	1/29/87	16	3.0	4.0	3.4	WEBBER CREEK		NO REPORT				
ALLEN RANCH	6470	1/27/87	18	4.0	9.0	7.9	WHISKEY CREEK	6800	2/01/87	---	8.5E	--	13.2
ARIZONA	6820	2/01/87	---	7.2E	11.5	13.3	WHITE ELEPHANT	7710	1/28/87	30	6.8	15.5	17.0
ASPEN GROVE	6500	2/01/87	---	5.7E	8.3	8.9	WHITE ELEPHANT PILL	7710	2/01/87	---	10.0	17.7	18.1
ASTER CREEK	7750	1/29/87	49	11.8	20.1	20.5	SOUTHSIOE SNAKE BASIN						
AUSTIN BROTHERS RNCH	6400	1/27/87	16	3.5	8.1	6.6	ANTELOPE RIDGE	6180	2/01/87	---	3.5E	7.5	--
BASE CAMP	7030	1/30/87	39	9.4	13.6	14.2	BADGER GULCH	6660	2/01/87	---	5.1E	9.2	8.1
BASE CAMP PILLW	7030	2/01/87	---	9.6	11.0	13.0	BATTLE CREEK	5720	2/04/87	6	1.2	--	2.9
BEAVERDAM CREEK		NO REPORT					BEAR CREEK	7800	2/01/87	---	6.0E	11.8	13.5
BIG SPRINGS	6400	1/28/87	34	7.5	12.7	14.0	BEAR CK SNOTEL	7800	2/01/87	---	5.0	11.0	13.0
BIRCH CREEK	6800	1/29/87	23	5.6	7.5	7.7	BIG BENO	6700	1/29/87	14	2.0	8.0	6.2
BLACK BEAR	7950	2/01/87	---	17.9E	--	26.4	BOSTETTER R.S.	7500	2/01/87	---	6.6E	--	14.2
BLACK CANYON		NO REPORT					BOSTETTER RS PILLW	7500	2/01/87	---	5.5	12.3	12.4
BLACK MOOSE		NO REPORT					BOY SCOUT CAMP		NO REPORT				
BLACKROCK	8900	2/01/87	---	13.1E	14.4	14.9	BULL BASIN	5460	2/04/87	8	1.2	--	1.4
BLINO BULL SUMM	8650	1/29/87	44	10.1	18.6	18.3	CEDAR CREEK		NO REPORT				
BLIND BULL PILLW	8650	2/01/87	---	14.1	22.2	18.5	CLEAR CREEK MEADOWS		NO REPORT				
BLUE LEDGE MINE	6900	2/01/87	---	4.4E	17.9	11.8	COLUMBIA BASIN	6650	1/29/87	21	3.4	6.0	6.5
BLUE RIDGE	6780	1/29/87	29	7.8	13.9	13.6	OEALINE	7400	1/26/87	33	8.3	14.3	15.5
BDNE	6200	1/29/87	13	2.5	5.9	5.6	DEADLINE SOUTH	7450	1/26/87	39	11.2	19.3	16.9
BROCKMAN STATION	6430	1/29/87	23	5.1	9.2	6.8	FAWN CREEK		NO REPORT				
BRYAN FLAT	6420	1/29/87	27	5.6	7.2	6.4	FOX CREEK	6800	2/01/87	---	3.3E	6.9	7.5
CAMP CREEK	6580	1/29/87	17	3.2	6.2	7.2	FRY CANYON		NO REPORT				
CCC CAMP	7000	1/29/87	28	5.8	8.2	8.5	GEORGE CREEK		NO REPORT				
CDTTONWOOD LAKE	7600	1/29/87	41	9.4	12.1	12.4	GEORGE PEAK		NO REPORT				
COTTONWOOD CR PILLW	7600	2/01/87	---	10.7	--	--	GOAT CREEK	8800	2/01/87	---	5.4E	9.9	11.7
COULTER CREEK	7020	1/28/87	39	6.5	14.0	15.1	GOLD CREEK	6600	1/29/87	10	1.30	--	3.9
COULTER CREEK PILLW	7020	2/01/87	---	8.1	11.6	15.9	HOWELL CANYON	7980	2/01/87	---	9.8E	21.2	18.2
COLO SPRINGS		NO REPORT					HOWELL CANYON PILLW	7980	2/01/87	---	8.1	17.8	15.3
CRAB CREEK	6860	2/01/87	---	3.6E	--	10.8	HUMMINGBIRD SPRINGS	8950	2/01/87	---	8.9E	--	15.5
CRAB CREEK PILLW	6860	2/01/87	---	3.9	7.3	11.4	HYOE PASTURE	5760	2/04/87	---	.1T	--	4.7
DARBY CANYON	8250	1/29/87	45	12.2	--	15.3	INDIAN GROVE		NO REPORT				
DEMPSEY CREEK		NO REPORT					JACK CREEK, LOWER	6800	1/28/87	16	2.6	--	2.6
EAST CREEK		NO REPORT					JACKS PEAK	8420	2/01/87	---	9.		

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
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SEVENTYSIX CREEK	7100	2/01/87	---	4.5E	7.7	8.3
SEVENTYSIX CK SNOTEL	7100	2/01/87	---	2.4S	8.4	6.3
SHOSHONE BASIN	5810	2/01/87	---	2.3E	5.2	4.8
SILVER CITY	6400	2/04/87	27	7.6	12.4	11.4
SOUTH MOUNTAIN	6500	2/01/87	26	7.2	10.6	10.1
SOUTH MTN PILLOW	6500	2/01/87	---	6.8	12.5	9.6
SUBLETT		NO REPORT				
SUCCOR CREEK	AM 6100	2/04/87	---	2.6E	--	4.4
TAYLOR CANYON	6200	1/28/87	11	1.4	5.2	4.1
TOE JAM AM	AM 7700	1/29/87	12	2.0	4.7	7.4
VAUGHT RANCH	AM 5830	2/04/87	9	1.8	--	3.0
VIPONT		NO REPORT				
WAR EAGLE	7280	2/04/87	30	8.4	--	18.3
WILSON CREEK		NO REPORT				
GREAT BASIN			WATERSHED VII			
CHRISTENSEN RANCH		NO REPORT				
CLIFF CANYON		NO REPORT				
CU8 RIVER R.S.	5450	2/01/87	---	4.3E	--	6.6
DANIELS CREEK		NO REPORT				
DRY BASIN		NO REPORT				
DRY CREEK FLAT		NO REPORT				
EMIGRANT SUMMIT	7390	2/02/87	33	8.0	17.7	16.9
EMIGRANT SUM PILLOW	7390	2/01/87	---	8.0	--	19.3
EMIGRATION CANYON	6500	2/02/87	19	4.5	8.4	7.6
FRANKLIN BASIN	8020	1/26/87	---	8.1E	15.5	16.6
FRANKLIN BSN PILLOW		NO REPORT				
GIVEOUT	6860	1/28/87	20	3.9	11.4	8.5
GIVEOUT PILLOW	6840	2/01/87	---	3.3	11.9	8.9
GIVEOUT NEW	6930	1/28/87	16	3.2	9.8	7.6
HORSESHOE BASIN		NO REPORT				
LIBERTY SPRING	8600	2/01/87	---	10.1E	27.3	24.2
LITTLE BEAVER	6790	1/28/87	20	4.3	13.1	10.5
LOWER ELKHORN		NO REPORT				
LOWER HOME CANYON	7640	1/29/87	23	4.7	10.8	9.7
MONTPELIER CREEK	6540	2/01/87	---	2.6E	7.5	5.7
OXFORD MOUNTAIN	6800	2/01/87	---	2.7E	--	--
OXFORD SPRING	6740	2/01/87	---	2.7E	--	7.9
OXFORD SPRING PILLOW	6740	2/01/87	---	2.2	8.8	8.9
STRAWBERRY CREEK	5820	2/02/87	16	4.0	9.4	7.5
STRAWBERRY-MINK DVD	6720	2/01/87	---	7.6E	15.5	14.8
UPPER ELKHORN		NO REPORT				
UPPER HOME CANYON	8560	1/29/87	38	9.3	18.1	15.8
WHISKEY FLAT		NO REPORT				
WILLOW FLAT	6070	2/02/87	22	5.3	--	11.2
WORM CREEK		NO REPORT				

The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State

Idaho Department of Water Resources
Soil and Water Conservation Districts of Idaho

Federal

U.S. Department of Agriculture
Forest Service
U.S. Department of Army
Corps of Engineers
U.S. Department of Commerce
NOAA, National Weather Service
U.S. Department of Interior
Bureau of Reclamation
Geological Survey, Water Resources Division
Shoshone-Bannock Tribal Council

Local

Big Lost River Irrigation District
Big Wood Irrigation Company
Boise Project Board of Control
Idaho Water District #01
Lewiston Orchards Irrigation District
Little Wood River Irrigation District
North Board of Control — Owyhee Project
Salmon Falls Irrigation Company
South Board of Control — Owyhee Project

Private

Cyprus Mining Company
FMC Corporation
Idaho Power Company
Le Bois Resort
Washington Water Power Company

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

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SOIL CONSERVATION SERVICE

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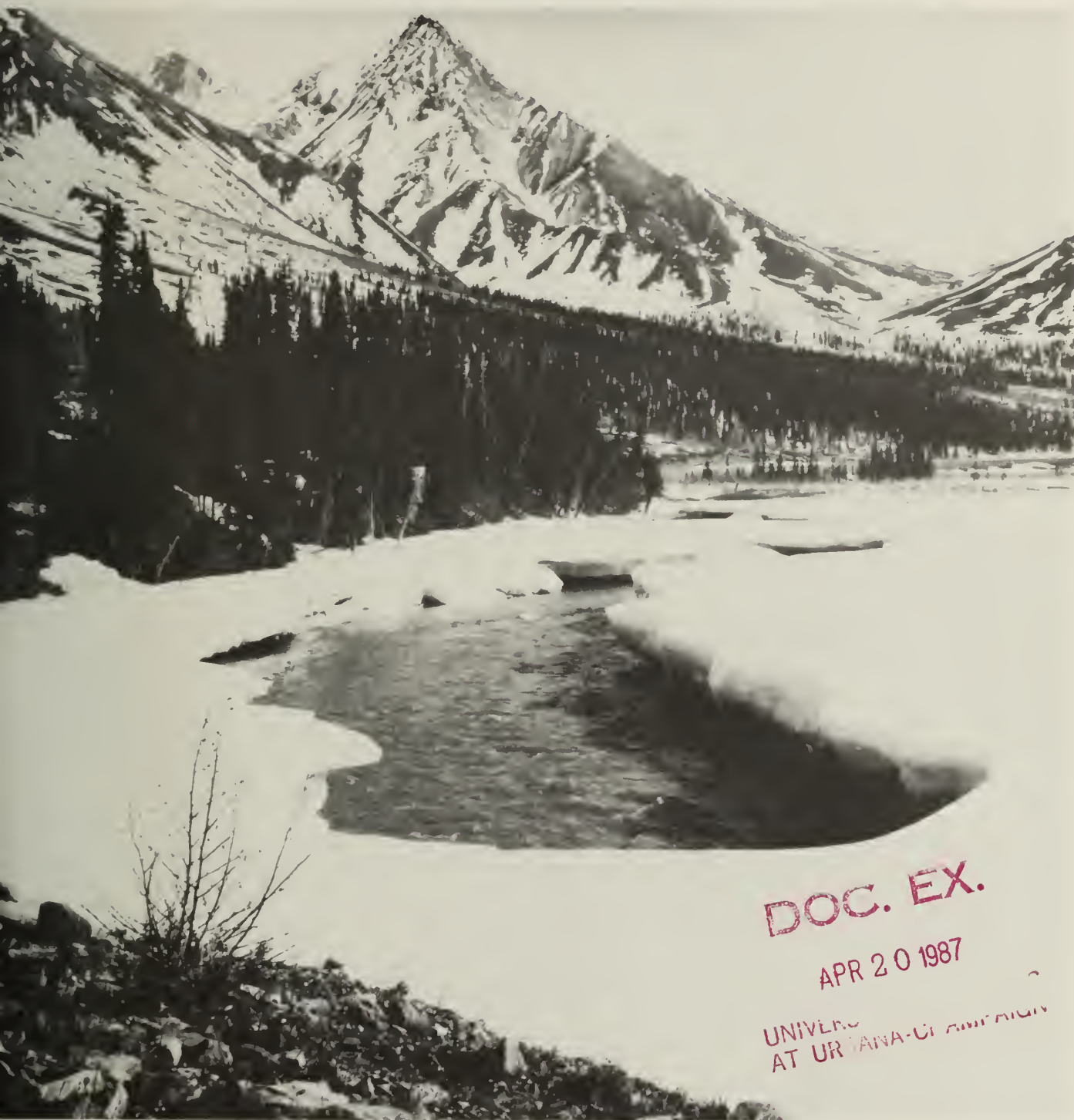
Soil
Conservation
Service

Boise,
Idaho



Idaho Water Supply Outlook

March 1, 1987



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APR 20 1987

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Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are termed reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. Because of the limited space, snow survey measurements are not published in monthly reports. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola, Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Denver, CO 80211
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 97102
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97208
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 547, Portland, OR 97209.

Published by other agencies:

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Idaho Water Supply Outlook

and

Federal — State — Private Cooperative Snow Surveys

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"Programs and assistance of the United States Department of Agriculture are available without regard to race, creed, color, sex, age, or national origin."

THE HISTORY OF THE CITY OF BOSTON

FROM THE FIRST SETTLEMENT
TO THE PRESENT TIME
BY
JOSEPH NEALE, ESQ.

IN TWO VOLUMES.
THE FIRST VOLUME.
CONTAINING THE HISTORY FROM
THE FIRST SETTLEMENT
TO THE YEAR 1700.

LONDON:
PRINTED BY J. NEALE, AT THE
SIGN OF THE THREE KINGS, IN
ST. MARTIN'S LANE, NEAR
ST. JOHN'S CHURCH.

1790.
[The following is a list of the names of the
persons who have been
mayors of the city of Boston, from
the first settlement to the present time.]

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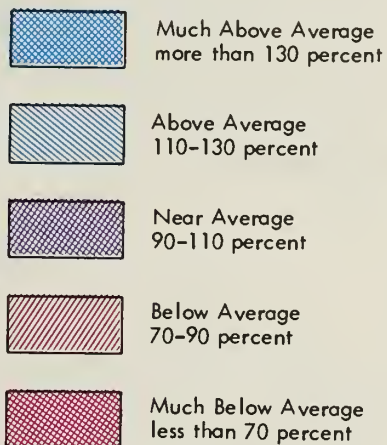


STREAMFLOW PROSPECTS
IDAHO

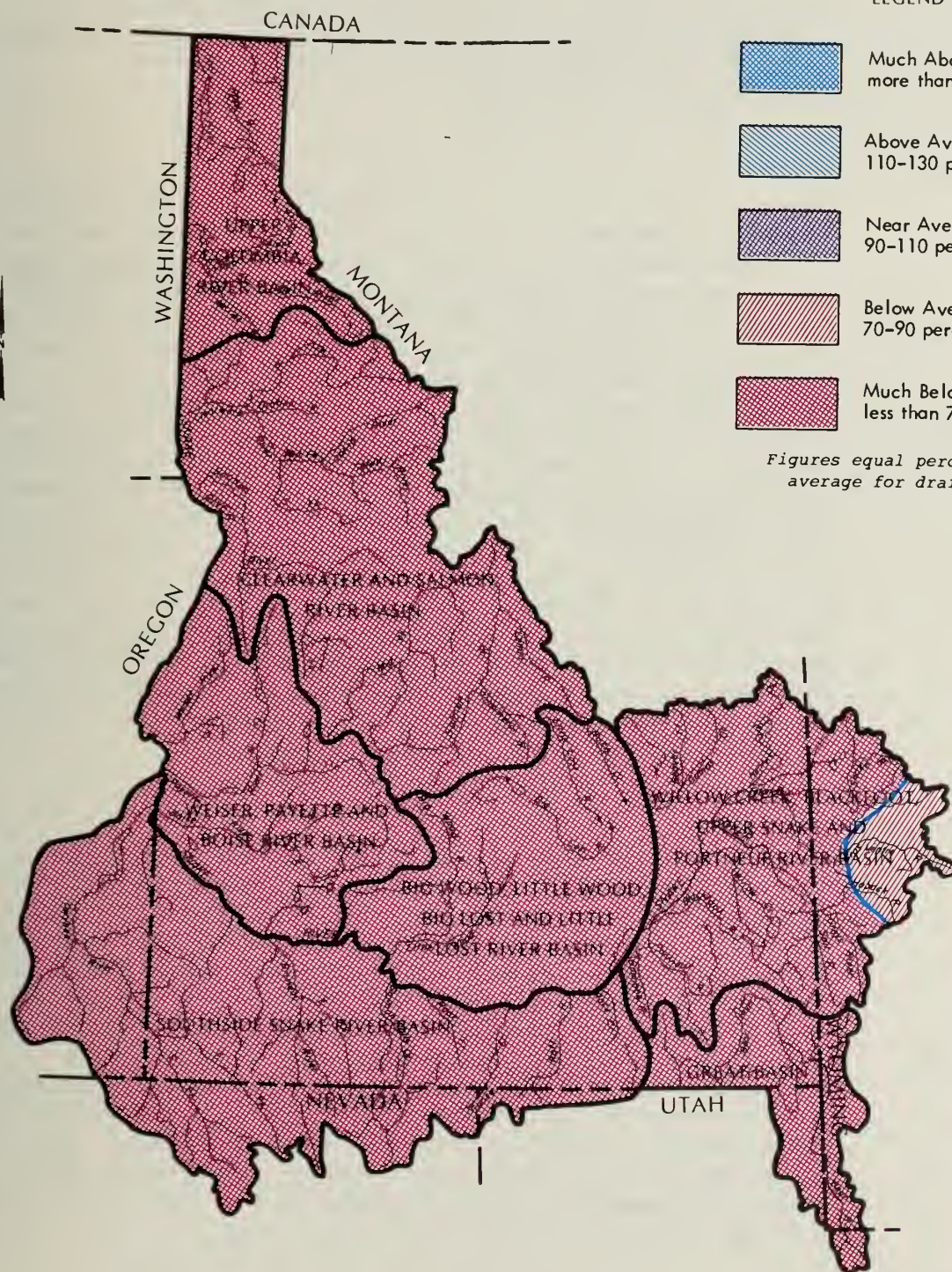
0 25 50 75 100 MI

0 50 100 150 KM

LEGEND



Figures equal percent of
average for drainage.



GENERAL OUTLOOK

SUMMARY:

SNOWPACKS IN SOUTH AND CENTRAL IDAHO ARE NEAR THE SECOND LOWEST ON RECORD, ACCORDING TO MARCH 1 SNOW SURVEYS. SPRING AND SUMMER STREAMFLOW FORECASTS ARE MUCH BELOW NORMAL, AND SEVERAL MAJOR IRRIGATION RESERVOIRS ARE NOT EXPECTED TO FILL. SEE THE BACK PAGE OF THIS BULLETIN FOR SUGGESTED WATER CONSERVATION PRACTICES.

SNOWPACK:

March 1 snow surveys show little or no improvement in Idaho's snowpack conditions from the previous month. Although February brought more precipitation than previous months, snow accumulation remained below normal for the month and well below normal for the water year over the entire state. In north Idaho, from the Clearwater drainage north, snowpack conditions range from 65 to 78% of average. Most basins in the central part of the state report well below normal snowpacks ranging from 39 to 62% of average. Snowpacks in the extreme southern, eastern, and southeastern parts of the state range from 53 to 69% of average. Many snow courses in central Idaho report the second lowest water content on record for the first of March. Only the extreme drought year of 1977 reported lower readings. By this time of year, about 80% of the season's snowpack is on the ground. Much above average snowfall will be needed during March and early April to significantly improve the present conditions.

PRECIPITATION:

Precipitation during February was below normal across most of Idaho for the fifth consecutive month, with the average for the entire state being only 64% of normal. Southwest and southcentral Idaho, however, received above normal precipitation with Boise at 116% of average and Twin Falls at 130%. Most of the state was quite consistent, ranging between 55 and 65% of normal. On the lower end of the scale, Porthill received just 16% of its normal February precipitation, and Ashton only 35%. Temperatures were above normal across the entire state. The southeast corner was the warmest, averaging four degrees above normal. Elsewhere the range was from 1.5 to 2 degrees above normal.

RESERVOIRS:

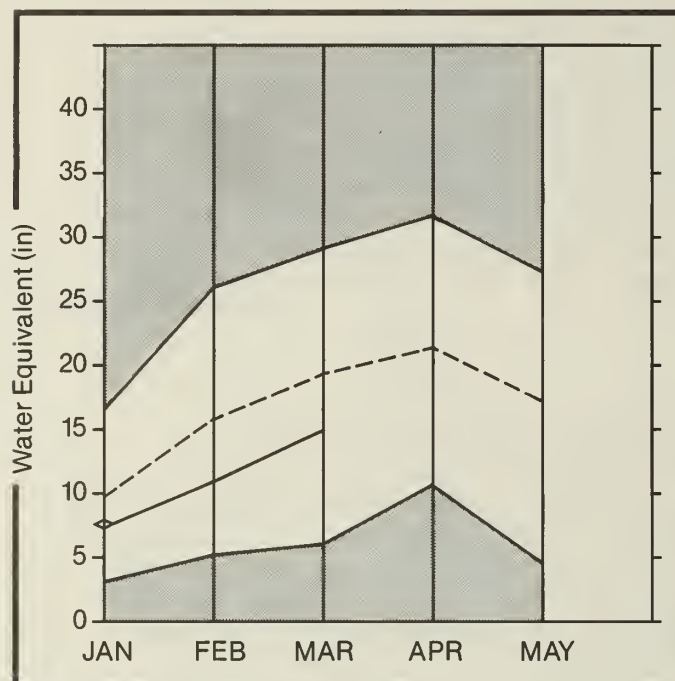
Low snowpack and runoff forecasts have prompted most reservoir operators to begin storing water earlier than normal, and many projects are now releasing minimum outflows. Twenty-four key reservoirs across the state report a combined storage of 104% of average, with most reservoirs reporting between 105% and 135% of normal. Exceptions to this are Pend Oreille Lake, Coeur d'Alene Lake, and Lucky Peak Reservoir which report only 18, 56, and 66% of normal, respectively. Salmon Falls Creek Reservoir on the other hand, reports contents of 176% of normal. With the deficient snowpack and the probability of early irrigation withdrawals, several reservoir systems including Lucky Peak, Arrowrock, Anderson Ranch and Owyhee are not expected to fill this spring.

STREAMFLOW:

The fifth consecutive month of below normal precipitation has once again reduced streamflow forecasts from those reported a month ago. Forecasts generally range from 60 to 70% of normal in northern Idaho, 25 to 60% in central Idaho, 60 to 70% in the east, and 40 to 60% across the southern edge of the state. The Big Lost River at Howell Ranch is now forecasted to yield record low streamflow for the April-September period, slightly lower than the 1977 drought year. Most other streams in the Wood and Lost river basins are expected to yield the second lowest volume on record. Elsewhere in the state, the Portneuf at Topaz and Oakley Reservoir inflow are also expected to yield the second lowest volume on record. With snowmelt already beginning at low and middle elevations, water users can expect low peak streamflows along with earlier than normal recession to baseflow conditions.

Upper Columbia Basin

Mountain snowpack* (inches)



*Based on selected stations

Maximum



Average



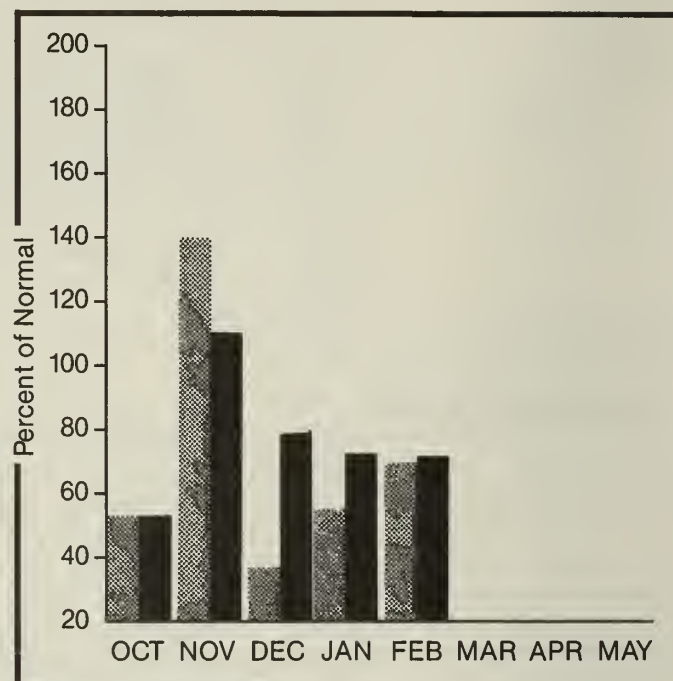
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

In comparison to normal, snow measurements taken near March 1 show little or no change from the figures reported a month ago. Basin snowpack figures range from 67% of average on the St. Joe River to 78% on the Priest River drainage. April-July streamflows are forecasted to range from 58% of normal on the Spokane at Post Falls to 70% on the inflow to Pend Oreille Lake. Carryover storage remains below to well below average on the three major lakes in the basin, ranging from only 18% of average on Lake Pend Oreille to 95% on Priest Lake. An intense Pacific storm system moved through the Idaho Panhandle immediately after the March 1 surveys were conducted, depositing up to seven inches of water content to the snowpack. Warm temperatures accompanying this storm caused some snowmelt at low to middle elevations. This storm, along with normal precipitation for the remainder of March, should improve the outlook for April 1.

UPPER COLUMBIA RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
KOOTENAI at Leona 2	APR-SEP	8441.0	7010.0	83	8698.0	103	5322.0	63
	APR-JUL	7340.0	6100.0	83	7568.0	103	4632.0	63
	APR-JUN	5899.0	4890.0	83	6070.0	103	3710.0	63
CLARK FORK at White Horse Rapids 2	APR-SEP	13370.0	9790.0	73	12865.0	96	6715.0	50
	APR-JUL	12150.0	8870.0	73	11665.0	96	6076.0	50
	APR-JUN	10360.0	7560.0	73	9943.0	96	5177.0	50
PEND OREILLE LAKE inflow 2	APR-SEP	14930.0	10500.0	70	13785.0	92	7215.0	48
	APR-JUL	13650.0	9610.0	70	12613.0	92	6607.0	48
	APR-JUN	11780.0	8250.0	70	10842.0	92	5658.0	48
PRIEST RIVER at Priest 2	APR-SEP	893.0	605.0	68	837.0	94	373.0	42
	APR-JUL	838.0	565.0	67	783.0	93	347.0	41
SPOKANE at Post Falls 2	APR-SEP	2820.0	1650.0	59	2693.0	95	607.0	22
	APR-JUL	2723.0	1590.0	58	2598.0	95	582.0	21
ST. JOE at Calder	APR-SEP	1281.0	820.0	64	1127.0	88	513.0	40
	APR-JUL	1211.0	775.0	64	1066.0	88	484.0	40
COEUR D'ALENE at Enaville	APR-SEP	830.0	525.0	63	899.0	108	152.0	18
	APR-JUL	789.0	495.0	63	850.0	108	140.0	18

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AUG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
HUNGRY HORSE	3451.0	2295.0	2281.0	2270.0	Kootenai ab Bonners Ferry	55	93 75
FLATHEAD LAKE	1791.0	635.1	812.5	909.0	Pend Oreille River	162	80 68
PEND OREILLE	1561.2	150.7	755.6	831.8	Clark Fork River	111	75 65
NOXON RAPIDS	335.0	291.7	322.8	298.0	Priest River	5	109 77
COEUR D'ALENE	291.2	123.2	125.4	220.9	Rethdrum Creek	3	87 78
PRIEST LAKE	97.7	32.8	33.3	34.4	Hayden Lake	4	83 70
					Coeur d'Alene River	10	89 70
					St. Joe River	5	91 67
					Spokane River	19	89 69
					Palouse River	3	67 79

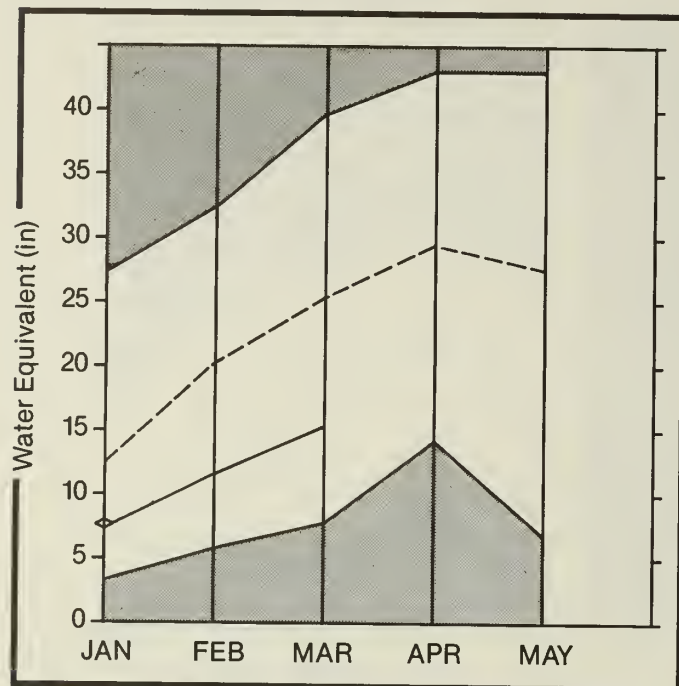
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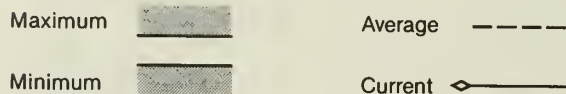
The average is computed for the 1961-85 base period.

Clearwater and Salmon River Basin

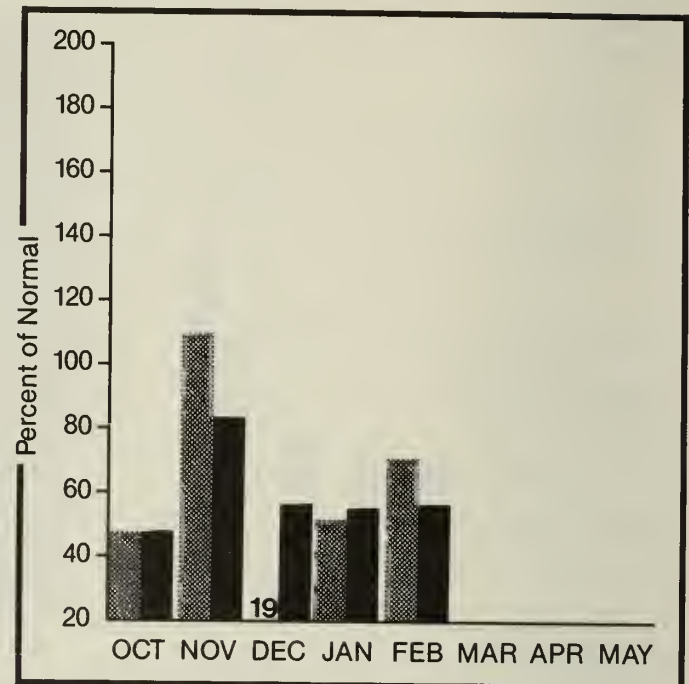
Mountain snowpack* (inches)



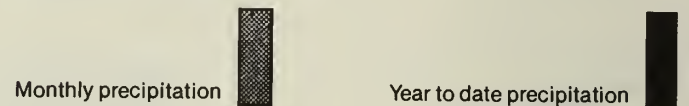
*Based on selected stations



Precipitation* (percent of normal)



*Based on selected stations



WATER SUPPLY OUTLOOK:

Snowpack conditions remain below to well below normal through out the basin ranging from 57% of average on the Salmon above Salmon to 78% on the Lemhi River drainage. April-July streamflows are forecast to range from 56% of average on the Salmon at Whitebird to 64% for Dworshak Reservoir inflow. Carryover storage in Dworshak Reservoir is good at 120% of average for March 1.

For more information contact your local Soil Conservation Service office.

CLEARWATER AND SALMON RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YP. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
CLEARWATER at Orofino	APR-SEP	5163.0	3170.0	61	4771.0	92	1456.0	28
	APR-JUL	4889.0	3000.0	61	4516.0	92	1370.0	28
CLEARWATER at Spalding	APR-SEP	9376.0	5280.0	63	7710.0	92	2680.0	32
	APR-JUL	7916.0	4990.0	63	7280.0	92	2530.0	32
DORSHAN RESERVOIR inflow	APR-SEP	3010.0	1956.0	65	2890.0	96	903.0	30
	APR-JUL	2822.0	1810.0	64	2710.0	96	847.0	30
SALMON at Whitebird	APR-SEP	7007.0	3890.0	56	5750.0	82	1856.0	27
	APR-JUL	6322.0	3510.0	56	5180.0	82	1677.0	27
SALMON at Salmon	APR-SEP	1077.0	645.0	60	1020.0	96	236.0	22
	APR-JUL	919.0	550.0	60	882.0	96	201.0	22

RESERVOIR STORAGE (1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
DORSHAN	3467.8	2492.0	2395.9	2084.1	North Fork Clearwater	13	80	66
					Lochsa River	4	73	65
					Selway River	3	80	71
					Clearwater River	17	78	66
					Salmon River ab Salmon	12	46	57
					Lemhi River	7	62	78
					Salmon River Total	32	54	60

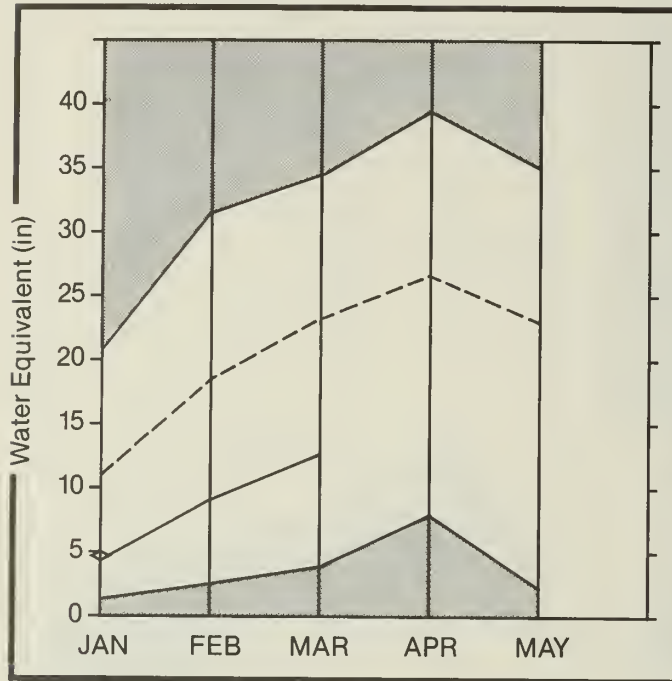
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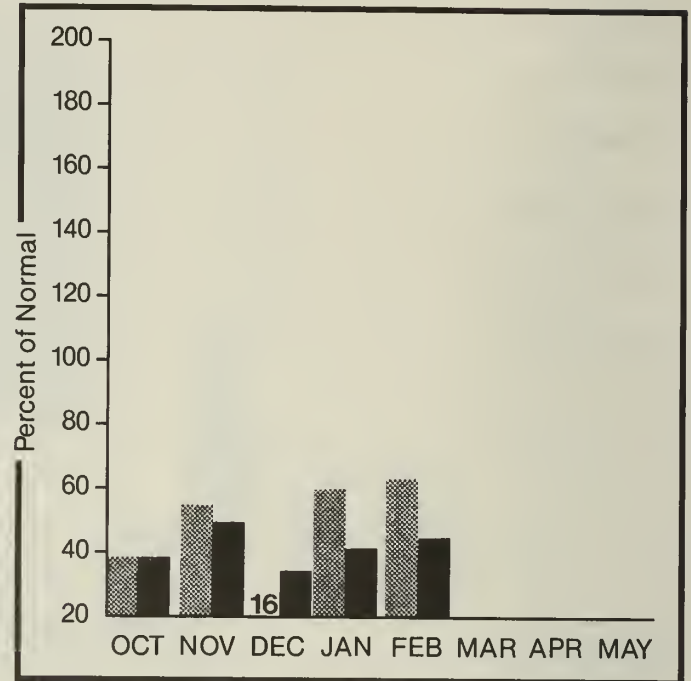
Weiser, Payette, and Boise River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)

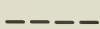


*Based on selected stations

Maximum



Average



Minimum



Current



Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Snowpack conditions for March 1 remain very low, ranging from 47% of normal on the S. Fork of the Boise River to 62% on the N. Fork of the Payette. Most higher elevation sites on the Boise River drainage are now reporting the second lowest snow water content on record. Only the extremely low snowpack year of 1977 showed lower water content readings. April-July streamflow forecasts are well below normal, ranging from 41% of average on the Boise River nr. Boise to 50% on the Weiser and North Fork Payette rivers. Carryover storage is near or above normal on all major reservoirs except Lucky Peak which is reported at 66% of normal and 27% of capacity. If the present trend continues, the Boise reservoir system is not expected to fill and irrigation water will be in short supply.

For more information contact your local Soil Conservation Service office.

WEISER, PAYETTE AND BOISE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
WEISER nr Weiser	APR-SEP	444.0	222.0	50	440.0	99	111.0	25
	APR-JUL	414.0	207.0	50	410.0	99	104.0	25
PAYETTE nr Horseshoe 2	APR-SEP	1862.0	856.0	46	1247.0	67	372.0	20
	APR-JUL	1717.0	790.0	46	1151.0	67	343.0	20
NF PAYETTE at Cascade 2	APR-SEP	568.0	284.0	50	381.0	67	143.0	26
	APR-JUL	531.0	265.0	50	355.0	67	138.0	26
NF PAYETTE nr Banks 2	APR-SEP	737.0	369.0	50	546.0	74	192.0	26
	APR-JUL	691.0	346.0	50	512.0	74	180.0	26
SF PAYETTE at Lowman	APR-SEP	516.0	240.0	47	348.0	67	132.0	26
	APR-JUL	459.0	210.0	46	306.0	67	120.0	26
DEADWOOD RESERVOIR inflow	APR-JUL	143.0	67.0	47	97.0	68	33.0	23
BOISE RIVER nr Twin Springs 1	APR-SEP	722.0	320.0	44	529.0	73	144.0	20
	APR-JUL	664.0	295.0	44	488.0	73	132.0	20
SF BOISE at Anderson Dam 1	APR-SEP	619.0	260.0	42	433.0	70	136.0	22
	APR-JUL	579.0	245.0	42	407.0	70	127.0	22
BOISE RIVER nr Boise 1	APR-SEP	1628.0	670.0	41	1158.0	71	300.0	18
	APR-JUL	1508.0	625.0	41	1077.0	71	271.0	18
	APR-JUN	1334.0	550.0	41	950.0	71	250.0	19

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE THIS YEAR	LAST YEAR	** AVERAGE	WATERSHED	NO. COURSES AVERAGE	THIS YEAR AS % OF LAST YR. AVERAGE
MANN CREEK	11.3	4.4	3.5	6.8	Mann Creek	5	71 61
CASCADE	703.2	471.3	465.6	393.8	Weiser River	12	65 61
DEADWOOD	162.0	91.8	84.9	84.5	North Fork Payette	10	60 62
ANDERSON RANCH	464.2	369.7	304.1	282.1	South Fork Payette	7	47 54
ARROWROCK	286.6	233.4	251.2	234.8	Payette River Total	16	54 58
LUCKY PEAK	307.0	81.4	36.0	122.5	Middle & North Fork Boise	9	38 50
LAKE LOWELL (DEER FLAT)	177.0	156.5	139.9	140.6	South Fork Boise River	11	36 47
					Boise River Total	20	40 50
					Canyon Creek	3	50 56

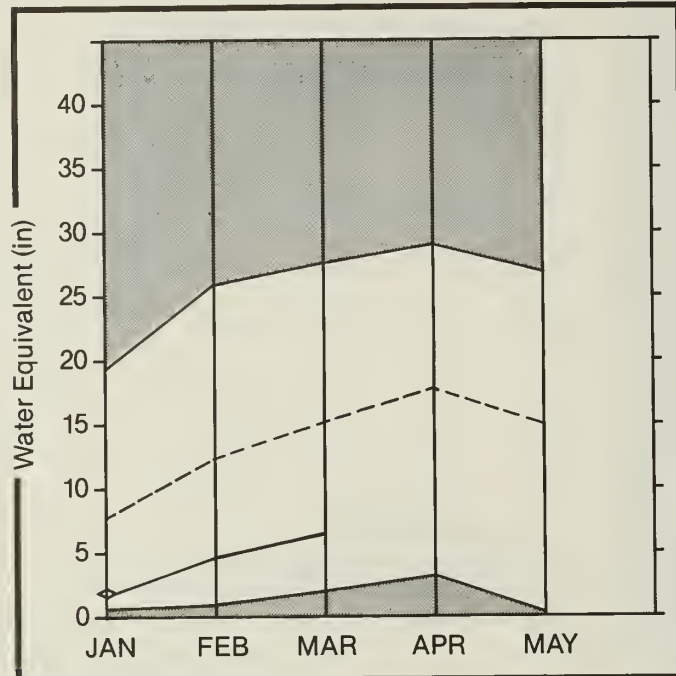
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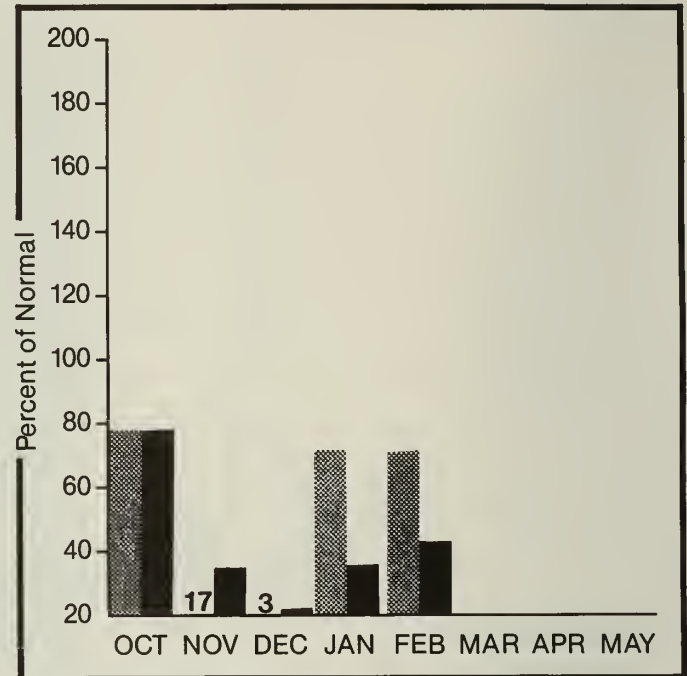
Big Wood, Little Wood, Big Lost, and Little Lost River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum

Average

Minimum

Current

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Basin snowpacks remain extremely low throughout the basin, ranging from only 39 to 51% of average for March 1. Nearly every snow course in the basin now reports the second lowest snow water content on record. Only in the extremely low snowpack year of 1977 were lower water contents reported. April-July streamflows are forecast to be very low, ranging from 25% of average on the Little Wood near Carey to 50% on the Little Lost near Howe. The forecast for the Big Lost River is the lowest on record and most other streams in the basin are expected to produce the second lowest volume on record. Reservoir storage is currently above normal for all major reservoirs. Magic Reservoir, however, may not fill to capacity based on current runoff forecasts and anticipated irrigation demands. If present weather patterns continue, water will be in short supply for the coming irrigation season.

For more information contact your local Soil Conservation Service office.

BIG WOOD, LITTLE WOOD, BIG LOST AND LITTLE LOST RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BIG WOOD nr Bellevue	APR-SEP	217.0	82.0	38	138.0	64	26.0	12
	APR-JUL	202.0	77.0	38	130.0	64	24.0	12
MAGIC RESERVOIR inflow	APR-SEP	338.0	93.0	28	238.0	70	34.0	10
	APR-JUL	322.0	86.0	27	224.0	70	32.0	10
LITTLE WOOD nr Carey	APR-SEP	107.0	27.0	25	59.0	55	11.0	10
	APR-JUL	99.0	25.0	25	55.0	56	10.0	10
BIG LOST at Howell Ranch	APR-SEP	219.0	96.0	44	170.0	78	39.0	18
	APR-JUL	192.0	88.0	46	153.0	80	34.0	18
	APR-JUN	148.0	67.0	45	117.0	79	27.0	18
BIG LOST nr Mackay 2	APR-SEP	195.0	86.0	44	158.0	81	39.0	20
LITTLE LOST bl Wet Cr	APR-SEP	38.8	19.0	49	33.0	85	7.0	18
	APR-JUL	31.4	15.5	49	27.0	86	6.0	19
LITTLE LOST nr Howe	APR-SEP	44.0	22.0	50	37.0	84	8.0	18
	APR-JUL	33.0	16.5	50	29.0	85	6.0	18

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE THIS YEAR	LAST YEAR	** AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE	
MAGIC	191.5	119.7	93.4	102.4	Big Wood ab Magic	10	33	44
LITTLE WOOD	30.0	23.6	21.6	17.6	Camas Creek	6	39	49
CAREY VALLEY	14.4	7.0	6.4	---	Big Wood Total	15	35	46
MACKAY	44.4	35.9	25.3	32.6	Little Wood River	4	29	39
					Fish Creek	3	27	41
					Big Lost River	9	35	47
					Little Lost River	4	43	51

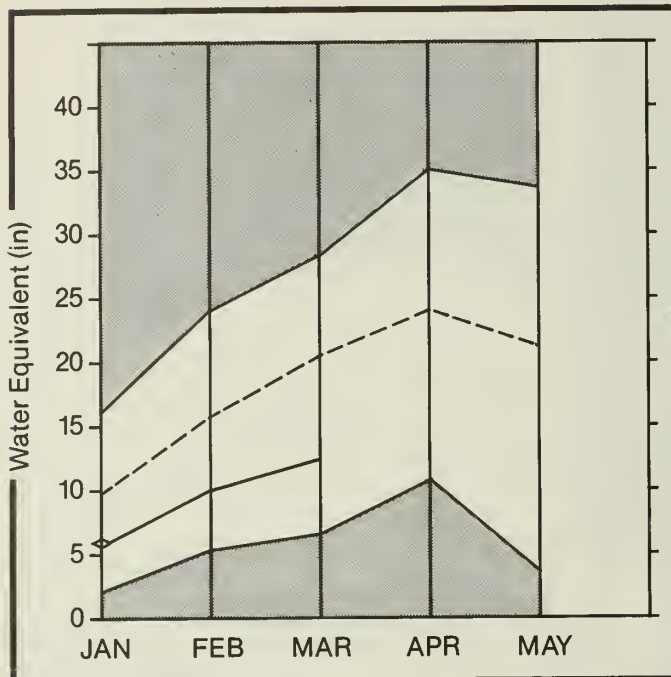
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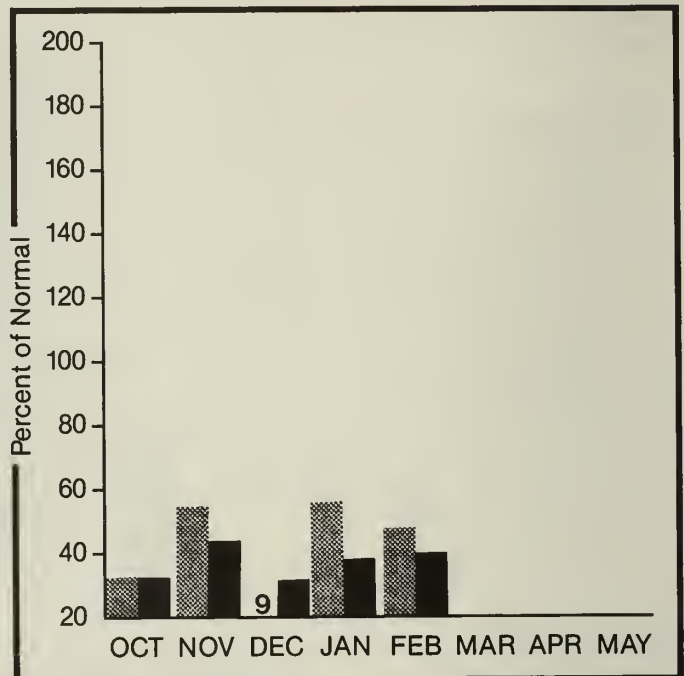
Willow Creek, Blackfoot, Upper Snake, and Portneuf River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum ——— Average - - - - -
Minimum ——— Current ◊ ———

Monthly precipitation [hatched bar] Year to date precipitation [solid black bar]

WATER SUPPLY OUTLOOK:

March 1 snow surveys show snowpack conditions continue to be well below average throughout the basin with most watersheds reporting 55 to 70% of normal snowpacks. Two exceptions are the Beaver-Camas Creek basin near Dubois which reports only 48% of average and the Gros Ventre River drainage in Wyoming, where the snowpack is slightly below normal at 85% of average. Streamflow forecasts have been lowered slightly from those published a month ago, and now range from 58 to 68% of average. The forecast for the Portneuf at Topaz is the second lowest on record. Reservoir storage levels are near or above average in all reservoirs except Jackson Lake, which is being maintained at a low level for construction purposes. If near normal precipitation is received over the next 3 to 4 months, all major reservoirs are expected to fill and water supplies should be adequate to meet most water user needs.

For more information contact your local Soil Conservation Service office.

WILLOW CREEK, BLACKFOOT, UPPER SNAKE AND FORTNEUF RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
HENRY'S FORK nr Ashton 2	APR-SEP	746.0	460.0	62	530.0	71	385.0	52
	APR-JUL	557.0	345.0	62	395.0	71	289.0	52
HENRY'S FORK nr Rexburg 2	APR-SEP	1595.0	960.0	60	1212.0	76	636.0	40
	APR-JUL	1260.0	750.0	60	958.0	76	504.0	40
FALLS RIVER nr Squirrel	APR-JUL	373.0	235.0	63	298.0	80	164.0	44
TETON RIVER ab S Leigh Ck	APR-SEP	194.0	130.0	67	157.0	81	103.0	53
	APR-JUL	145.0	97.0	67	117.0	81	77.0	53
TETON nr St. Anthony	APR-SEP	479.0	311.0	65	374.0	79	240.0	50
	APR-JUL	387.0	255.0	66	302.0	78	194.0	50
SNAKE at Moran 1	APR-SEP	888.0	605.0	68	720.0	81	462.0	52
PALISADES LAKE inflow 1	APR-SEP	3852.0	2500.0	65	3310.0	86	1580.0	41
SNAKE nr Heise 2	APR-SEP	4142.0	2720.0	66	3560.0	86	1700.0	41
	APR-JUL	3524.0	2290.0	65	3030.0	86	1444.0	41
SNAKE nr Blackfoot 2	APR-SEP	5680.0	3580.0	63	4600.0	81	2380.0	42
	APR-JUL	4589.0	2900.0	63	3720.0	81	1930.0	42
FORTNEUF at Topaz	MAR-SEP	109.0	63.0	58	93.0	85	38.0	35
	MAR-JUL	88.0	51.0	58	75.0	85	31.0	35

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
ISLAND PARK	127.6	123.0	96.0	110.1	Camas-Beaver Creeks	4	60	48
GRASSY LAKE	15.2	13.0	12.9	10.9	Henry's Fork River	13	49	55
JACKSON LAKE	624.4	91.0	149.4	535.9	Teton River	6	50	66
PALISADES	1357.0	1257.2	1069.9	1028.0	SNAKE above Palisades	29	48	66
AMERICAN FALLS	1700.0	1385.8	1103.3	1277.2	SNAKE above Jackson Lake	8	43	57
BROWNLEE	975.3	619.2	682.0	531.0	Gros Ventre River	3	59	85
BLACKFOOT		NO REPORT			Groves River	4	46	62
HENRY'S LAKE	90.4	75.8	---	79.4	Salt River	5	46	64
RIRIE	96.5	50.0	---	51.3	Willow Creek	10	60	71
					Blackfoot River	8	42	60
					Portneuf River	11	44	56
					Toponce Creek	3	48	55

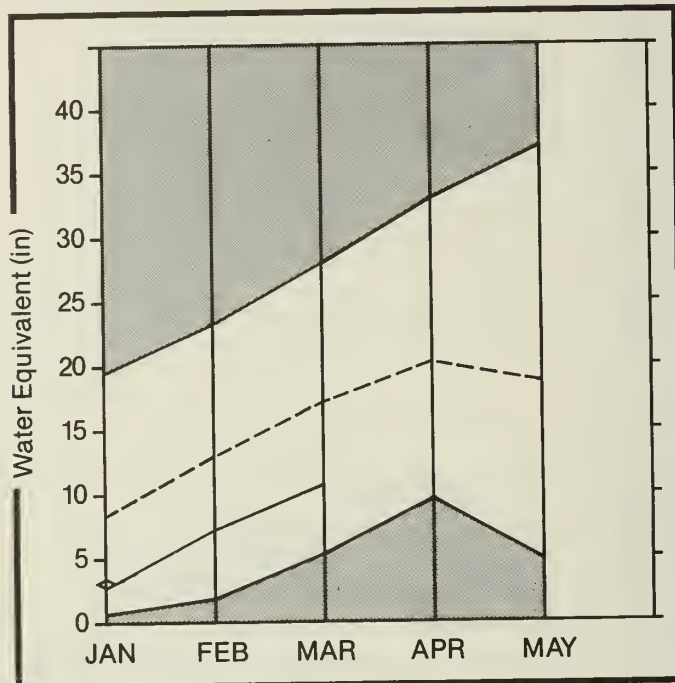
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

Southside Snake River Basin

Mountain snowpack* (inches)



*Based on selected stations

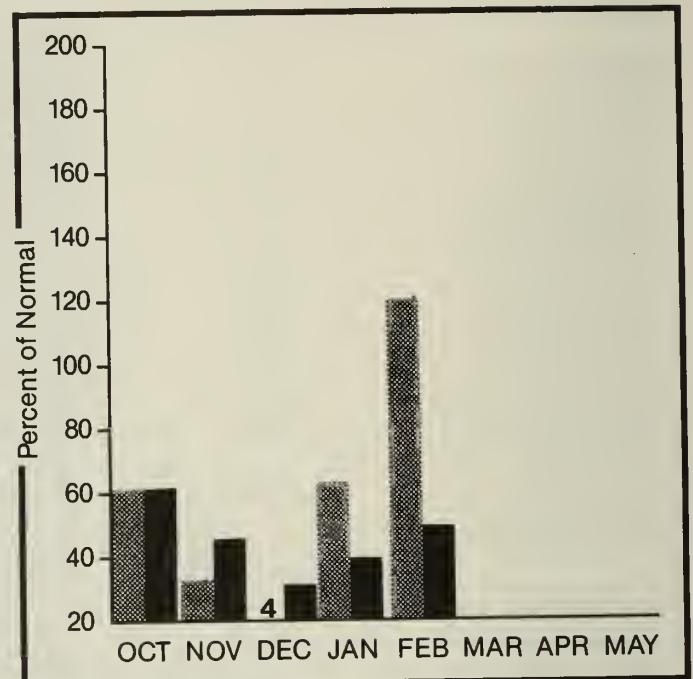
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

Snow surveys taken near March 1 show snowpack conditions have improved slightly in comparison to normal, but remain well below average. Snowpacks now range from 54 to 62% of average except on the Owyhee drainage which reports 69% of normal snowpack. Streamflow forecasts are well below normal ranging from 43% of average for Salmon Falls Creek to 59% for the Owyhee at Rome. The forecast for the inflow to Oakley reservoir is the second lowest on record. Reservoir storage is reported to be good in all reservoirs, ranging from 103 to 176% of average for March 1. Water supplies should be adequate for most water users if near normal precipitation is received for the remainder of the season.

For more information contact your local Soil Conservation Service office.

SOUTHSIDE SNAKE RIVER BASIN

STREAMFLOW FORECASTS

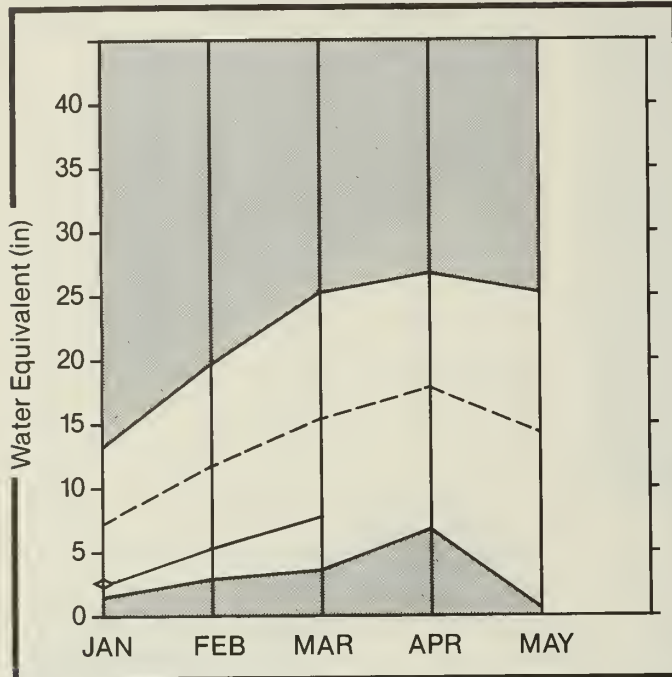
FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
OAKLEY RESERVOIR inflow	APR-SEP	33.0	14.8	45	27.0	82	7.0	21
	APR-JUL	29.7	13.1	44	24.0	81	6.0	20
SALMON FALLS CK nr San Jacinto	MAR-SEP	102.0	44.0	43	85.0	83	20.0	20
	MAR-JUL	97.0	42.0	43	81.0	84	19.0	20
	MAR-JUN	91.0	40.0	44	76.0	84	18.0	20
BRUNEAU nr Hot Spring	MAR-SEP	260.0	118.0	45	225.0	87	52.0	20
	MAR-JUL	248.0	112.0	45	214.0	86	50.0	20
OWYHEE RIVER nr Gold Creek 2	APR-JUL	27.8	15.0	49	31.0	112	3.0	11
OWYHEE RIVER nr Owyhee 2	APR-JUL	86.0	40.0	47	86.0	100	11.0	13
OWYHEE LAKE inflow 1	APR-SEP	453.0	260.0	57	521.0	115	59.0	13
	APR-JUL	425.0	245.0	58	489.0	115	46.0	11
OWYHEE at Rome 2	APR-JUL	376.0	220.0	59	408.0	109	34.0	9

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVE'D	THIS YEAR AS % OF LAST YR. AVERAGE
OAKLEY	77.4	30.8	37.1	29.9	Raft River	8	48 62
SALMON FALLS	182.6	94.9	92.8	53.9	Goose-Trapper Creeks	5	41 54
OWYHEE	715.0	519.2	703.8	486.6	Salmon Falls Creek	12	51 61
					Bruneau River	10	48 61
					Owyhee River	16	50 69

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
 2 - Corrected for upstream diversions or changes in reservoir storage.
 The average is computed for the 1961-85 base period.

Great Basin

Mountain snowpack* (inches)

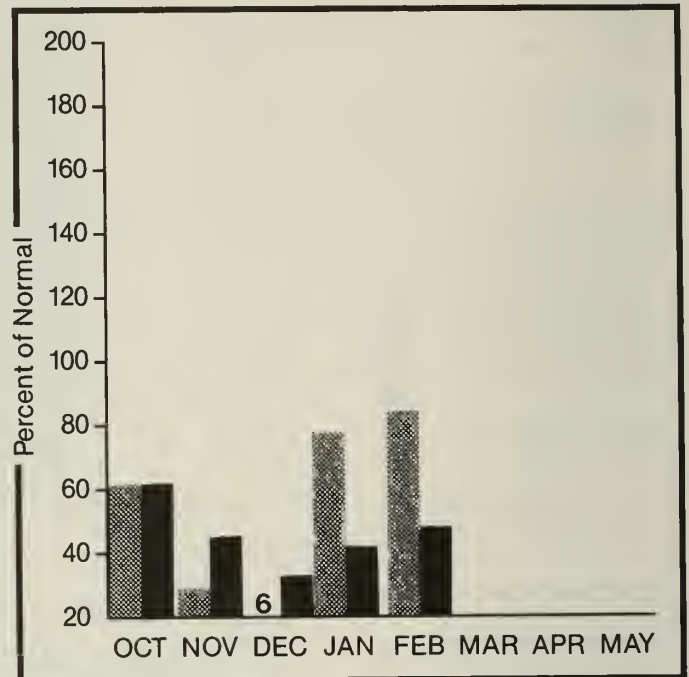


*Based on selected stations

Maximum —
Minimum —

Average ----
Current ◇—

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

March 1 snow surveys show snowpack conditions remain well below normal throughout the basin, ranging from 41 to 63% of average. Several snow courses reported the second lowest snow water content on record for March 1. Only the extremely low snowpack year of 1977 reported lower water contents on these sites. April-September streamflows are forecast to be well below normal, ranging from 43 to 54% of average. Montpelier Creek Reservoir and Bear Lake have above normal storage for March 1 at 129 and 106% of average, respectively. Water supplies should be adequate for most water users, assuming near normal precipitation is received for the remainder of the season.

For more information contact your local Soil Conservation Service office.

GREAT BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BEAR at Harer	APR-SEP	310.0	150.0	48	237.0	76	76.0	25
MONTPELIER CK nr Montpelier	APR-SEP	13.9	6.0	43	11.0	79	3.0	22
CUB RIVER nr Preston	APR-SEP	51.8	28.0	54	44.0	85	16.0	31
	APR-JUL	46.8	25.0	53	39.0	83	14.0	30

RESERVOIR STORAGE		(1000AF)			WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **	THIS YEAR	LAST YEAR	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	% OF AVERAGE
BEAR LAKE	1421.0	1051.5	1057.7	992.5	Bear River (above Harer)	11	42	63
MONTPELIER CREEK	3.9	2.2	1.8	1.7	Montpelier Creek	6	31	54
					Mink Creek	6	35	53
					Cub River	2	40	55
					Malad River	7	28	41

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
 2 - Corrected for upstream diversions or changes in reservoir storage.
 The average is computed for the 1961-85 base period.

SNOW DATA MEASUREMENTS

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
UPPER COLUMBIA BASIN							WATERSHED 1						
ABOVE BURKE	4100	2/24/87	42	10.4	14.9	19.0	SADDLE MOUNTAIN	7940	2/25/87	46	13.4	22.5	22.0
BEAR MOUNTAIN	5400	3/07/87	82	31.9	37.0	53.0	SADDLE MTN PILLOW	7900	3/01/87	---	13.2	21.5	22.6
BEAR MTN PILLOW	5400	3/01/87	---	41.5	36.3	53.8	SAVAGE PASS	6170	3/02/87	53	15.0	22.8	23.3
BENTON MEADOW	2370	2/25/87	10	2.8	6.8	6.0	SAVAGE PASS PILLOW	6170	3/01/87	---	15.2	22.8	24.6
BENTON SPRING	4920	2/25/87	39	13.3	12.1	17.2	SCHWARTZ LAKE	8540	3/01/87	38	8.5	14.4	10.5
BOYER MOUNTAIN	5250	2/26/87	51	16.4	19.1	22.3	SECESH SUMMIT	6520	2/24/87	55	16.8	32.3	30.8
BREEZY SADDLE	5010	2/25/87	61	18.1	19.2	27.7	SECESH SUMMIT PILLOW	6520	3/01/87	---	15.6	31.6	31.2
BUNCHGRASS MEADOWS	5000	2/25/87	52	17.0	17.4	26.1	SHANGHAI SUMMIT	4570	2/25/87	56	16.1	19.2	23.4
BUNCHGRASS MOWPILLOW	5000	3/01/87	---	19.4	18.8	24.2	SHANGHAI SUM PILLOW	4570	3/01/87	---	17.1	20.5	24.8
CHILCO RIDGE	3650	2/27/87	15	3.0	4.8	6.2	SHERWIN	3200	2/26/87	26	8.5	10.8	12.3
CONIE RIDGE	3900	2/27/87	18	4.2	4.7	7.4	SHERWIN PILLOW	3200	3/01/87	---	6.7	10.2	11.5
COPPER RIDGE	4820	3/02/87	59	19.6	16.8	23.8	SLAG-A-MELT LAKE	8750	3/01/87	45	11.8	22.1	22.5
CORNER CREEK	3150	2/27/87	24	6.9	8.1	6.6	SQUAW MEADOW	5900	2/24/87	61	18.8	32.5	31.4
EAST RAGGED SADDLE	3740	2/28/87	41	14.4	15.3	18.0	TWIN LAKES	6510	3/03/87	85	28.2	31.5	36.5
EAST TWIN	4130	2/27/87	24	7.3	12.0	9.9	TWIN LAKES PILLOW	6400	3/01/87	---	25.0	28.4	36.9
FORTY-NINE MEADOWS	4830	2/25/87	56	17.1	18.5	26.3	TWIN PEAKS	9190	2/27/87	48	12.2	20.0	21.0
FOURTH OF JULY SUM	3200	2/24/87	30	6.2	8.8	8.2	VIENNA MINE	8960	2/28/87	56	15.0	45.0	31.2
HUMBOLOT GULCH	4250	2/24/87	33	8.5	11.7	14.2	VIENNA MINE PILLOW	8960	3/01/87	---	14.7	38.8	31.1
HUMBOLOT GLCH PILLOW	4250	3/01/87	---	8.4	9.0	13.2	WEST BRANCH	5560	3/02/87	42	14.2	21.2	22.9
KELLOGG PEAK	5560	2/26/87	51	16.9	17.9	27.3	WEST BRANCH PILLOW	5560	3/01/87	---	13.5	21.9	23.0
LOOKOUT	5140	2/24/87	63	20.5	25.6	29.5							
LOOKOUT PILLOW	5140	3/01/87	---	20.7	24.2	28.4							
LOST LAKE	6110	2/25/87	97	33.1	40.9	48.9							
LOST LAKE PILLOW	6110	3/01/87	---	41.8	41.6	55.0							
LOWER SANDS CREEK	3120	3/04/87	41	14.2	15.8	16.8							
MOSCOW MOUNTAIN	4410	2/27/87	39	12.3	17.6	14.9							
MOSQUITO RIDGE	5200	2/26/87	72	22.9	25.3	33.7							
MOSQUITO PILLOW	5200	3/01/87	---	22.8	21.0	34.0							
RAGGED RIDGE	3330	2/28/87	21	5.6	4.3	---							
ROLAND SUMMIT	5120	2/26/87	70	22.3	19.6	32.8							
SAGE CREEK SADDLE	4080	2/27/87	38	11.2	12.9	16.1							
SCHWEITZER BASIN	6090	2/27/87	84	30.9	28.4	40.4							
SCHWEITZER 8N PILLOW	6090	3/01/87	---	33.4	31.4	42.4							
SCHWEITZER 8OWL	4800	2/27/87	56	18.5	15.2	27.2							
SCHWEITZER RIDGE	6200	2/27/87	90	34.7	29.7	40.1							
SHERWIN	3200	2/26/87	26	8.5	10.8	12.3							
SHERWIN PILLOW	3200	3/01/87	---	6.7	10.2	11.5							
SKITWISH RIDGE	5110	3/02/87	70	21.9	19.9	30.2							
SUNSET	5540	2/26/87	62	19.4	23.7	28.1							
SUNSET PILLOW	5540	3/01/87	---	22.6	23.3	30.8							
TWIN SPIRIT DIVIDE	3480	2/28/87	30	10.0	12.3	12.2							
WEST TWIN	4220	2/27/87	23	7.1	10.4	8.8							
CLEARWATER AND SALMON BASINS							WATERSHED 11						
ABOVE GILMORE	8200	3/03/87	28	5.6	10.2	7.8	ATLANTA SUMMIT	7600	3/01/87	52	14.1	36.6	30.2
ASPEN-HALL PASS	8200	3/03/87	28	6.7	10.7	8.5	ATLANTA SUM PILLOW	7580	3/01/87	---	14.2	35.3	27.4
BANNER SUMMIT	7040	2/28/87	47	13.5	32.0	25.8	ATLANTA TOWNSITE	5370	3/01/87	24	6.8	12.2	---
BANNER SUMMIT PILLOW	7040	3/01/87	---	12.9	30.0	23.2	BANNER SUMMIT	7040	2/28/87	47	13.5	32.0	25.8
BEAR BASIN	5350	2/27/87	41	12.8	14.6	17.6	BANNER SUMMIT PILLOW	7040	3/01/87	---	12.9	30.0	23.2
BEAR BASIN PILLOW	5350	3/01/87	---	9.6	15.1	17.6	8AD BEAR	4940	2/27/87	25	7.4	17.8	13.1
81G CREEK SUMMIT	6580	3/01/87	---	19.9E	38.4	31.5	BEAR BASIN	5350	2/27/87	41	12.8	14.6	17.6
81G CREEK SUM PILLOW	6580	3/01/87	---	16.9	37.5	28.0	BEAR BASIN PILLOW	5350	3/01/87	---	9.6	15.1	17.6
80RAH	6200	2/27/87	18	3.6	5.5	4.9	BEAR SADDLE	6180	3/01/87	46	13.8	21.0	27.9
80ULDER CREEK	5440	3/02/87	38	11.0	18.2	21.1	BEAR SADDLE PILLOW	6180	3/01/87	---	13.1	21.7	27.8
BREEZY SADDLE	5010	2/25/87	61	18.1	19.2	27.7	8ENNETT MOUNTAIN	6560	3/01/87	32	7.8	21.6	15.2
BRUNDAGE MOUNTAIN	7560	3/01/87	---	22.1E	41.2	40.1	8ENNETT MTN PILLOW	6560	3/01/87	---	9.2	---	16.4
CAYUSE AIRSTRIP	3500	2/25/87	25	6.8	10.3	11.2	81G CREEK SUMMIT	6580	3/01/87	---	19.9E	38.4	31.5
COOL CREEK	6250	2/26/87	86	27.9	35.2	42.6	81G CREEK SUM PILLOW	6580	3/01/87	---	16.9	37.5	28.0
COOL CREEK PILLOW	6280	3/01/87	---	28.3	34.8	40.1	80GUS BASIN	6340	2/26/87	41	11.7	24.0	20.9
COPESE CAMP	7520	2/26/87	24	4.7	7.8	6.5	80GUS BASIN ROAD	5540	2/26/87	9	2.7	1.6	5.8
CRATER MEADOWS	5960	2/26/87	75	24.8	37.1	38.0	80ULDER CREEK	5440	3/02/87	38	11.0	18.2	21.1
CRATER MOWS PILLOW	5960	3/01/87	---	26.2	28.2	40.0	8RUNDAGE MOUNTAIN	7560	3/01/87	---	22.1E	41.2	40.1
CROOKED FORK	3610	3/02/87	31	7.8	12.6	11.9	8RUNDAGE RESV PILLOW	4500	3/01/87	---	13.8	---	---
DEADWOOD SUMMIT	6860	2/28/87	67	21.6	44.9	40.2	CAMAS CREEK DIVIDE	5710	3/01/87	21	5.8	11.6	10.6
DEADWOOD SUM PILLOW	6860	3/01/87	---	20.0	43.3	44.4	CHIMNEY CREEK	6400	3/01/87	27	7.4	18.7	13.9
DOUBLE SPGS PASS	8380	2/27/87	28	6.2	12.7	8.7	COUCH SUMMIT	6840	3/01/87	31	6.4	22.0	16.7
ELK BUTTE	5550	2/25/87	63	18.8	25.2	33.1	COZY COVE	5380	2/28/87	28	7.9	15.2	14.8
ELK BUTTE PILLOW	5550	3/01/87	---	22.6	27.9	37.2	COZY COVE PILLOW	5380	3/01/87	---	9.2	17.8	22.4
FISH LAKE AIRSTRIP	5650	2/25/87	77	23.6	30.3	34.7	CRAWFORD R.S.	4860	2/28/87	10	2.6	6.3	7.4
FORTY-NINE MEADOWS	4830	2/25/87	56	17.1	18.5	26.3	DEADMAN GULCH	5600	2/27/87	30	9.4	17.3	15.1
GALENA SUMMIT	8780	2/27/87	38	9.3	25.3	20.2	DEADWOOD AIRSTRIP	5360	3/01/87	---	8.2E	14.2	14.3
GALENA SUMMIT PILLOW	8780	3/01/87	---	8.6	22.7	16.2	DEADWOOD SUMMIT	6860	2/28/87	67	21.6	44.9	40.2
GIBBONS PASS	7100	2/25/87	41	11.6	19.8	20.5	DEADWOOD SUM PILLOW	6860	3/01/87	---	20.0	43.3	44.4
HEMLOCK BUTTE	5810	2/25/87	85	27.0	32.1	42.7	DOLLARHIDE SUMMIT	8420	3/01/87	39	9.3	29.7	20.9
HEMLOCK BUTTE PILLOW	5810	3/01/87	---	27.8	32.6	42.8	DOLLARHIDE SM PILLOW	8420	3/01/87	---	10.3	30.7	21.3
HOOODOO BASIN	6050	2/28/87	90	31.8	40.1	43.9	GRAHAM GUARD STATION	5690	2/28/87	30	7.9	18.1	14.9
HOOODOO BASIN PILLOW	6050	3/01/87	---	27.3	35.4	41.4	GRAHAM G.S. PILLOW	5690	3/01/87	---	8.0	19.2	16.8
HOOODOO CREEK	5900	2/28/87	79	27.4	33.1	40.7	10AHO CITY TOWNSITE	4000	2/27/87	8	2.6	4.0	4.5
LEATHERMAN PASS	9860	2/27/87	60	16.2	19.1	19.7	JACKSON PEAK	7070	2/28/87	45	12.6	33.9	25.4
LEHMI PASS	7480	3/02/87	29	7.2	9.6	7.7	JACKSON PEAK PILLOW	7070	3/01/87	---	13.6	35.3	26.8
LEHMI RIDGE	8100	3/02/87	30	8.2	11.0	8.7	LAKE FORK	5290	2/24/87	40	13.8	15.8	14.3
LEHMI RIDGE PILLOW	8100	3/01/87	---	6.8	1								

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
816 WOOD, LITTLE WOOD, 816 LOST AND LITTLE LOST BASINS							WATERSHED IV						
BEAR CANYON	7900	2/28/87	31	6.6	20.4	15.4	JACKPINE CREEK	7350	2/26/87	42	11.6	--	19.8
BEAR CANYON PILLOW	7900	3/01/87	---	5.5	17.9	13.9	JOHNSON CREEK	6730	2/24/87	34	8.0	18.6	12.0
BENNETT MOUNTAIN	6560	3/01/87	32	7.8	21.6	15.2	KILGORE	6320	3/01/87	27	6.2	11.8	10.7
BENNETT MTN PILLOW	6560	3/01/87	---	9.2	--	16.4	LATHAM SPRINGS	7630	2/24/87	49	13.8	32.2	28.9
CAMAS CREEK DIVIOE	5710	3/01/87	21	5.8	11.6	10.6	LAVA CREEK	7350	2/26/87	38	9.3	19.4	14.0
CHIMNEY CREEK	6400	3/01/87	27	7.4	18.7	13.9	LEWIS LAKE DIVIOE	7850	2/25/87	63	18.3	46.5	35.8
COPPER BASIN	7640	2/28/87	13	2.4	11.0	8.1	LOWER PEBBLE	5780	2/25/87	27	6.8	14.8	12.1
COUCH SUMMIT	6840	3/01/87	31	6.4	22.0	16.7	LUCKY DOG	6860	2/24/87	44	12.4	25.4	27.9
DOLLARHIDE SUMMIT	8420	3/01/87	39	9.3	29.7	20.9	MAOISON PLATEAU	7750	2/27/87	44	11.9	25.2	19.3
DOLLARHIDE SM PILLOW	8420	3/01/87	---	10.3	30.7	21.3	MC RENOLDS RESERVOIR	6720	2/26/87	37	9.0	16.9	17.4
DRY FORK	7220	2/27/87	27	5.1	19.9	14.4	MINK CREEK	6410	2/26/87	35	8.3	19.3	16.0
FISHPOLE LAKE	9300	2/28/87	36	7.3	28.6	17.0	MORAN	6750	2/27/87	31	7.9	16.0	11.8
GALENA	7440	2/27/87	---	7.3E	21.1	16.6	MUD CREEK	7100	2/26/87	48	13.7	22.5	16.9
GALENA PILLOW	7440	3/01/87	---	7.8	21.1	16.4	NORTH PUTNAM	7240	2/27/87	48	13.1	26.9	25.5
GALENA NEW	7470	2/27/87	34	7.7	23.6	18.3	PACKSADOLE SPRING	8200	2/26/87	53	14.8	32.3	24.7
GALENA SUMMIT	8780	2/27/87	38	9.3	25.3	20.2	PEBBLE CREEK	6550	2/25/87	32	7.8	16.6	14.4
GALENA SUMMIT PILLOW	8780	3/01/87	---	8.6	22.7	16.2	PHILLIPS BENCH	8200	2/27/87	64	18.9	38.5	25.5
GARFIELD R.S.	6560	3/02/87	14	3.2	15.4	9.9	PHILLIPS BENCH PILL.	8200	3/01/87	---	15.9	35.2	23.7
GARFIELD R.S. PILLOW	6560	3/01/87	---	3.5	14.7	9.9	PINE CREEK PASS	6810	2/27/87	36	9.0	18.9	15.4
GRAHAM RANCH	6270	2/27/87	25	5.1	15.5	12.6	POISON MEADOWS	8500	2/28/87	57	15.4	37.0	24.9
HILTS CREEK	8000	3/02/87	25	5.7	11.5	9.4	PUTNAM	7220	2/25/87	43	10.8	23.8	18.5
HILTS CREEK PILLOW	8000	3/01/87	---	5.8	12.5	11.3	SALT RIVER SUMMIT	7700	2/25/87	35	7.0	21.4	14.1
HYNDMAN CREEK	7440	2/28/87	25	5.3	18.1	12.7	SALT RIVER PILLOW	7700	3/01/87	---	6.9	20.0	13.9
HYNDMAN PILLOW	7440	3/01/87	---	4.8	16.6	11.4	SAWTELL MOUNTAIN	8720	2/27/87	61	16.0	38.9	28.8
IRON BOG	7650	2/27/87	27	4.5	16.5	12.4	SEGEWICK PEAK	7850	2/25/87	38	8.6	25.6	16.0
IRON MINE CREEK	6300	3/02/87	22	4.8	16.8	10.1	SHEEP MOUNTAIN	6570	2/26/87	29	7.2	13.3	12.0
LEADBELT	6700	2/27/87	25	4.4	10.0	8.5	SHEEP MTN PILLOW	6570	3/01/87	---	7.9	15.9	13.8
LEATHERMAN PASS	9860	2/27/87	60	16.2	19.1	19.7	SLUG CREEK DIVIOE	7230	2/25/87	33	7.8	22.7	14.7
LITTLE CAMAS FLAT	4940	3/01/87	14	4.4	2.8	6.2	SLUG CK OVO PILLOW	7230	3/01/87	---	8.6	25.9	16.7
LOST-WOOD DIVIOE	7900	2/28/87	36	8.2	28.5	19.8	SLAKE RIVER STATION	6920	2/25/87	40	10.2	23.3	18.5
LOST-WOOD OVO PILLOW	7900	3/01/87	---	8.1	29.2	20.5	SNOW KING MTN	7660	2/25/87	41	9.4	18.4	12.9
MASCOT MINE	7780	2/28/87	21	4.1	17.3	12.9	SOMSEN RANCH	6840	2/24/87	38	8.3	18.4	12.9
MOONSHINE	7440	2/26/87	20	4.2	10.4	9.0	SOMSEN RANCH PILLOW	6800	3/01/87	---	7.3	18.0	12.4
MOONSHINE PILLOW	7440	3/01/87	---	5.3	10.7	9.4	SPRING CRK. PILLOW	9000	3/01/87	---	15.3	38.1	19.6
MOUNT BALDY	8920	2/27/87	41	10.2	21.0	18.1	STATE LINE	6660	2/27/87	35	8.9	17.9	12.7
MULDOON	6320	3/02/87	13	3.2	10.3	7.4	SULPHUR PEAK	7070	2/24/87	35	8.2	19.7	14.2
SAWMILL CANYON	7000	2/26/87	12	3.8	9.5	7.0	TARGHEE PASS	6980	3/01/87	---	7.3E	9.9	12.9
SOLDIER R.S.	5740	3/01/87	27	4.3	16.0	11.6	TETON PASS W.S.	7740	2/27/87	62	17.9	31.0	22.4
SOLDIER R.S. PILLOW	4330	3/01/87	---	4.6	--	--	TEX CREEK	6650	3/01/87	---	5.3E	10.1	8.6
STICKNEY MILL	7430	2/28/87	20	3.7	11.3	8.2	THUMB DIVIOE	7980	2/25/87	36	9.2	24.5	17.5
STICKNEY MILL PILLOW	7430	3/01/87	---	3.4	9.2	.0	TOGWOTEE PASS	9580	2/26/87	67	21.8	32.1	24.7
							TOGWOTEE PASS PILLOW	9580	3/01/87	---	17.4	27.7	21.2
							TOPONCE	6160	2/25/87	33	7.4	16.2	14.6
SWEDE PEAK	7640	3/02/87	23	5.9	20.2	15.2	TURPIN MEADOWS	6900	2/26/87	30	7.6	11.1	9.5
SWEDE PEAK PILLOW	7640	3/01/87	---	4.7	19.0	13.4	TWITCHELL CANYON	6300	2/27/87	37	10.7	--	14.4
TELFER RANCH	8840	3/02/87	12	3.4	12.3	7.9	TWO OCEAN PILLOW	9160	3/01/87	---	16.7	32.4	24.2
VIENNA MINE	8960	2/28/87	56	15.0	45.0	31.2	VALLEY VIEW	6680	2/26/87	32	8.0	10.6	14.8
VIENNA MINE PILLOW	8960	3/01/87	---	14.7	38.8	31.1	WEBBER CREEK	6700	2/26/87	19	3.2	5.4	4.8
WET CREEK SUMMIT	7680	3/02/87	21	4.5	10.6	10.0	WHISKEY CREEK	6800	2/27/87	40	10.4	21.6	17.7
							WHITE ELEPHANT	7710	2/27/87	42	10.5	25.7	21.5
							WHITE ELEPHANT PILL	7710	3/01/87	---	12.5	27.6	22.6
WILLOW, BLACKFOOT, UPPER SNAKE AND PORTNEUF BASINS							WATERSHED V						
AFTON RANGER STATION	6240	2/24/87	18	4.0	4.8	4.2	WILHORSE DIVIOE	6490	2/26/87	37	9.5	19.8	15.0
ALLEN RANCH	6470	2/24/87	26	5.9	14.2	10.2	WILHORSE OVO PILLOW	6490	3/01/87	---	8.9	18.4	.0
ARIZONA	6820	3/01/87	---	10.2E	20.4	--	WILLOW CREEK	8450	2/24/87	61	16.2	--	27.8
ASPEN GROVE	6500	3/01/87	---	7.4E	12.0	11.0	WILLOW CRK PILLOW	8450	3/01/87	---	12.7	37.1	23.5
ASTER CREEK	7750	2/25/87	51	14.7	37.4	25.4	WOOD CANYON DIVIOE	7450	2/24/87	37	8.9	24.2	16.4
AUSTIN BROTHERS RNCH	6400	2/24/87	22	5.2	11.5	8.6	SOUTHSIDE SNAKE BASIN						
BASE CAMP	7030	2/26/87	40	12.1	26.5	17.8	WATERSHED VI						
BASE CAMP PILLOW	7030	3/01/87	---	10.8	22.7	16.2	ANTELOPE RIDGE	6180	2/28/87	14	4.4	11.3	6.8
BEAVERDAM CREEK	6120	2/25/87	18	4.4	11.0	8.3	BADGER GULCH	6660	2/27/87	26	6.0	16.0	11.3
816 SPRINGS	6400	2/27/87	35	9.9	18.4	18.4	BEAR CREEK	7800	2/28/87	43	10.7	21.8	18.2
BIRCH CREEK	6800	2/26/87	27	7.1	13.0	10.2	BEAR CK SNOTEL	7800	3/01/87	---	8.9	20.3	18.1
BLACK BEAR	7950	2/27/87	61	18.8	44.9	35.0	816 BEND	6700	2/25/87	18	4.2	13.2	8.0
BLACK CANYON	7960	2/24/87	---	14.2E	32.9	--	BOSTETTER R.S.	7500	2/27/87	36	8.8	26.6	17.8
BLACK MOOSE	8160	3/01/87	---	22.3E	38.3	34.9	BOSTETTER R5 PILLOW	7500	3/01/87	---	7.9	23.5	16.0
BLACKROCK	8900	3/01/87	---	16.0E	--	18.7	BOY SCOUT CAMP	7740	2/27/87	40	9.8	17.0	13.4
BLIND BULL SUMM AM	8650	2/28/87	54	14.6	30.2	22.6	CEGAR CREEK	6820	2/28/87	21	5.1	10.0	9.4
BLIND BULL PILLOW	8650	3/01/87	---	15.2	39.9	22.1	CLEAR CREEK MEADOWS	9420	2/27/87	58	13.8	24.0	19.3
BLUE LEDGE MINE	6900	3/01/87	---	6.1E	10.8	14.3	DEADLINE	7400	3/01/87	34	10.9	19.8	19.1
BLUE RIDGE	6780	2/26/87	41	11.4	21.6	16.9	DEADLINE SOUTH	7450	3/01/87	49	16.8	32.8	21.1
BONE	6200	2/26/87	19	4.2	6.4	7.3	FOX CREEK	6800	2/28/87	26	6.4	10.5	9.9
BROCKMAN STATION	6430	2/26/87	27	7.5	10.9	9.7	FRY CANYON	6700	2/25/87	18	4.9	9.1	6.7
BRYAN FLAT	6420	2/24/87	36	7.4	10.3	8.4	GEORGE CREEK	8840	2/27/87	54	12.4	23.2	--
CAMP CREEK	6580	2/27/87	23	5.0	5.8	9.2	GOAT CREEK	8800	2/28/87	37	8.1	16.4	16.0
CCC CAMP	7000	2/25/87	33	6.4	16.0	11.1	GOLD CREEK	6600	2/25/87	10	2.5	8.7	5.2
COTTONWOOD LAKE AM	7600	2/28/87	44	12.5	22.2	16.5	HOWELL CANYON	7980	2/27/87	54	14.6	36.5	22.9
COTTONWOOD CR PILLOW	7600	3/01/87	---	13.0	--	--	HOWELL CANYON PILLOW	7980					

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
<hr/>						
GREAT BASIN			WATERSHED VII			
BURT'S-MILLER RANCH	7900	2/28/87	17	3.8	S.S	4.6
CLIFF CANYON	7200	2/25/87	16	2.9	10.0	8.7
CUB RIVER R.S.	5450	2/25/87	21	4.7	--	8.6
DANIELS CREEK	6270	2/25/87	18	3.1	8.9	5.9
DRY BASIN	7820	2/25/87	59	13.7	31.3	24.9
DRY BREAD POND	8350	2/26/87	25	5.6	24.0	16.0
DRY CREEK FLAT	6360	2/25/87	14	2.8	13.5	7.9
EMIGRANT SUMMIT	7390	2/26/87	47	11.5	36.0	21.9
EMIGRANT SUM PILLOW	7390	3/01/87	---	11.4	--	25.3
EMIGRATION CANYON	6500	2/26/87	28	5.9	15.7	9.9
FRANKLIN BASIN	8020	2/25/87	48	12.0	32.3	21.7
FRANKLIN BSN PILLOW	8040	3/01/87	---	14.7	38.2	26.3
GARDEN CITY SUMMIT	7600	2/26/87	28	5.6	24.9	15.4
GIVEOUT	6860	2/25/87	30	6.2	20.9	11.0
GIVEOUT NEW PILLOW	6840	3/01/87	---	5.0	20.7	11.8
GIVEOUT NEW	6930	2/25/87	24	4.8	18.2	9.9
HAYDEN FORK	9400	2/28/87	36	9.3	18.8	12.9
KELLEY RANGER STA.	8180	2/26/87	43	9.8	25.6	15.6
KELLEY R.S. PILLOW	8180	3/01/87	---	7.9	25.1	13.8
LIBERTY SPRING	8600	2/25/87	70	18.1	56.4	33.2
LITTLE BEAVER	6790	2/25/87	31	7.4	22.8	13.8
LOWER ELKHORN	6960	2/25/87	28	5.8	19.9	13.1
LOWER HOME CANYON	7640	2/26/87	29	6.3	21.6	12.0
MONTE CRISTO R.S.	8960	2/26/87	41	11.1	28.4	21.6
MONTPELIER CREEK	6540	3/01/87	---	3.6E	12.3	7.7
OXFORD MOUNTAIN	6800	2/25/87	22	4.2	16.3	9.7
OXFORD SPRING	6740	2/25/87	19	3.6	16.6	10.8
OXFORD SPRING PILLOW	6740	3/01/87	---	3.7	18.5	12.7
SLUG CREEK DIVIDE	7230	2/25/87	33	7.8	22.7	14.7
SLUG CK DVD PILLOW	7230	3/01/87	---	8.6	25.9	16.7
STILLWATER CAMP	8550	2/28/87	31	6.8	12.3	8.6
STRAWBERRY CREEK	5820	2/26/87	22	5.1	13.1	10.2
STRAWBERRY-MINK DVD	6720	2/25/87	38	8.8	27.7	19.0
UPPER ELKHORN	7140	2/25/87	38	7.4	20.9	16.4
UPPER HOME CANYON	8560	2/26/87	48	11.8	35.3	20.4
WILLOW FLAT	6070	2/25/87	32	8.2	--	14.3
WOOD CANYON DIVIDE	7450	2/24/87	37	8.9	24.2	16.4
WORM CREEK	6620	2/25/87	36	9.1	20.9	17.0

OTHER INFORMATION

FARMERS AND RANCHERS FACE WATER SHORTAGE THIS YEAR

Snow surveys taken near March 1 indicate that below to well below normal flows will occur on many streams across central and southern Idaho. Study this Water Supply Outlook Report carefully for streamflow and reservoir storage figures that concern your area.

Keep in touch with your irrigation district, reservoir manager, or others who monitor and regulate water supplies for estimates of the supply available to you. You may find you'll need to change crops, reduce planted acres, adjust tillage operations, or manage your livestock differently to conserve a short water supply.

Here are some water conservation tips to help make the best use of limited water supplies:

FARMERS

The type of crops you plant may need to be adjusted. Find out whether you will have a little water all season, or more in the spring and none later on. Vary crops accordingly. For example, alfalfa, corn and sugar beets need water all season. Wheat and barley need water early in the season.

Don't plant too early. Be sure the soil is warm enough for rapid and complete seed germination.

Consider using chemicals rather than tillage to control water-using weeds.

If you decide to plant fewer acres, plant drought tolerant cover crops on unplanted fields to protect from wind erosion.

IRRIGATORS

Know your soil type. This is your guide to rate and frequency of irrigation. Know precisely how fast your soil can accept water and its total water-holding capacity. This will help you decide how much water to apply at a given time.

If you have a conservation plan for your farm, or if the soil in your area has been mapped, the Soil

Conservation Service can cross-check soil type and irrigation data and provide you with the water-holding capacity of your soil for a given crop.

Check your irrigation system carefully. Make certain ditches are cleared of water-wasting weeds or debris that slow delivery. Check sprinkler heads and nozzles for wear and leaks, pipes for tight connections, and valves for leaks.

Consider ditch lining or gated pipe. This will reduce the 10-90 percent loss which occurs in earth ditches.

DRYLAND FARMERS

Valley precipitation totals are below normal across central and southern Idaho: Soil moisture levels are below normal and good spring precip will be needed to bring moisture up to normal.

A conservation tillage system is your best protection. Leaving residues from the previous crop on the soil surface will retard runoff, increase absorption and percolation, and reduce evaporation.

Keep necessary tillage shallow. Delay spring tillage until absolutely essential to help conserve soil moisture.

Don't use turn plows or one-way discs. Use sweeps for the first necessary operation. Over-tillage will destroy residues and dry out the soil.

Use chemicals for weed control whenever possible.

RANCHERS

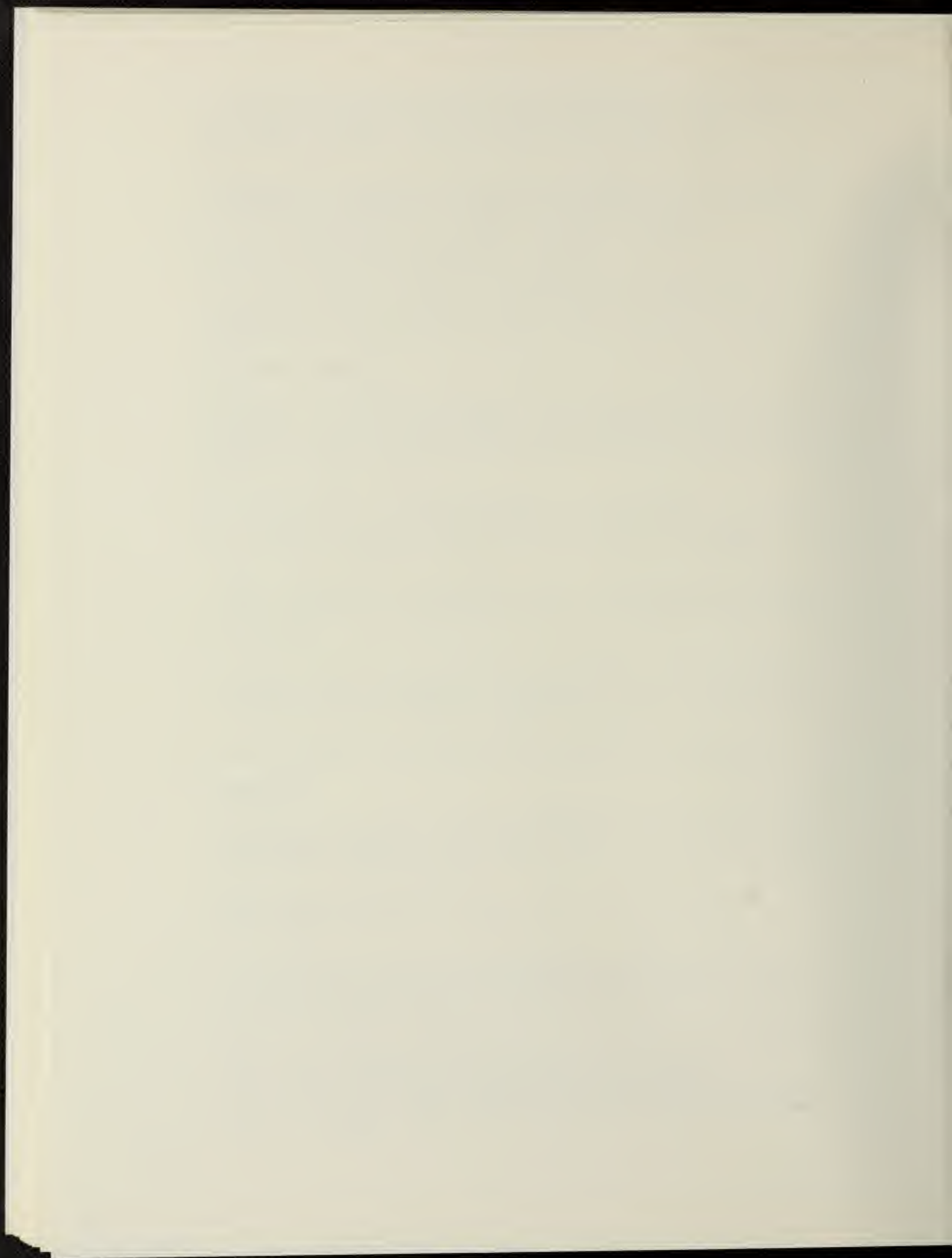
Consider adjusting livestock numbers to balance with the forage supply. Cull herds more than normal; sell calves and lambs early.

Determine forage needs and plan to buy needed supplements early.

Grow small grain for use as hay or pasture; it requires less water than conventional forage. Defer planting pasture, hay or range forage until a more favorable water year.

Check with the Soil Conservation Service and your local soil conservation district for details concerning your soil and water conservation problems. The next water supply forecast will be issued about April 1, 1987.





The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State	Idaho Department of Water Resources Soil and Water Conservation Districts of Idaho
Federal	U.S. Department of Agriculture Forest Service U.S. Department of Army Corps of Engineers U.S. Department of Commerce NOAA, National Weather Service U.S. Department of Interior Bureau of Reclamation Geological Survey, Water Resources Division Shoshone-Bannock Tribal Council
Local	Big Lost River Irrigation District Big Wood Irrigation Company Boise Project Board of Control Idaho Water District #01 Lewiston Orchards Irrigation District Little Wood River Irrigation District North Board of Control — Owyhee Project Salmon Falls Irrigation Company South Board of Control — Owyhee Project
Private	Cyprus Mining Company FMC Corporation Idaho Power Company Le Bois Resort Washington Water Power Company

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

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SOIL CONSERVATION SERVICE

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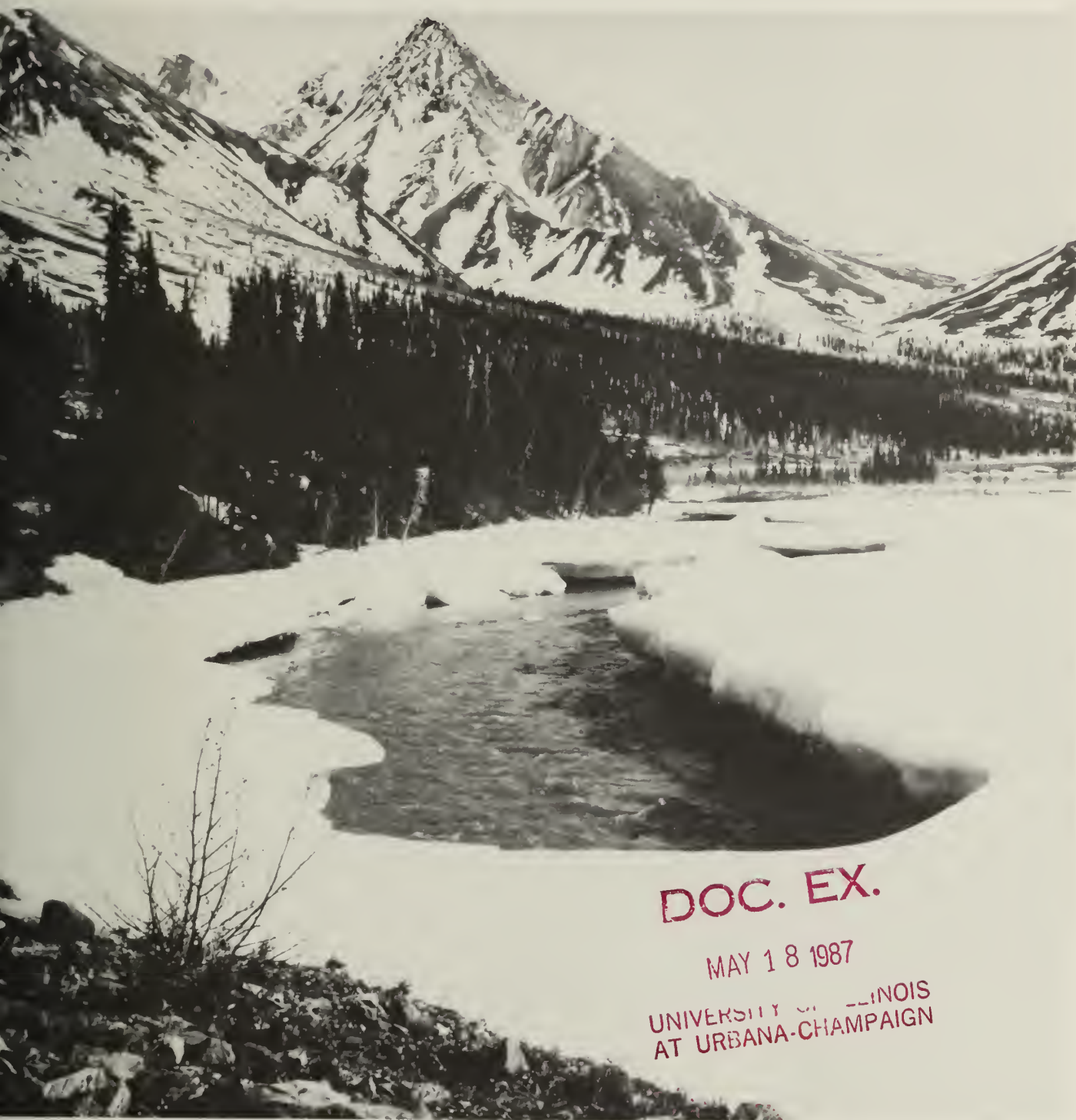
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Boise,
Idaho



Idaho Water Supply Outlook

April 1, 1987



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MAY 18 1987

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are termed reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. Because of the limited space, snow survey measurements are not published in monthly reports. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola, Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Denver, CO 80211
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 97102
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97208
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 547, Portland, OR 97209.

Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Idaho Water Supply Outlook

and

Federal — State — Private Cooperative Snow Surveys

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Boise, Idaho 83702

In cooperation with

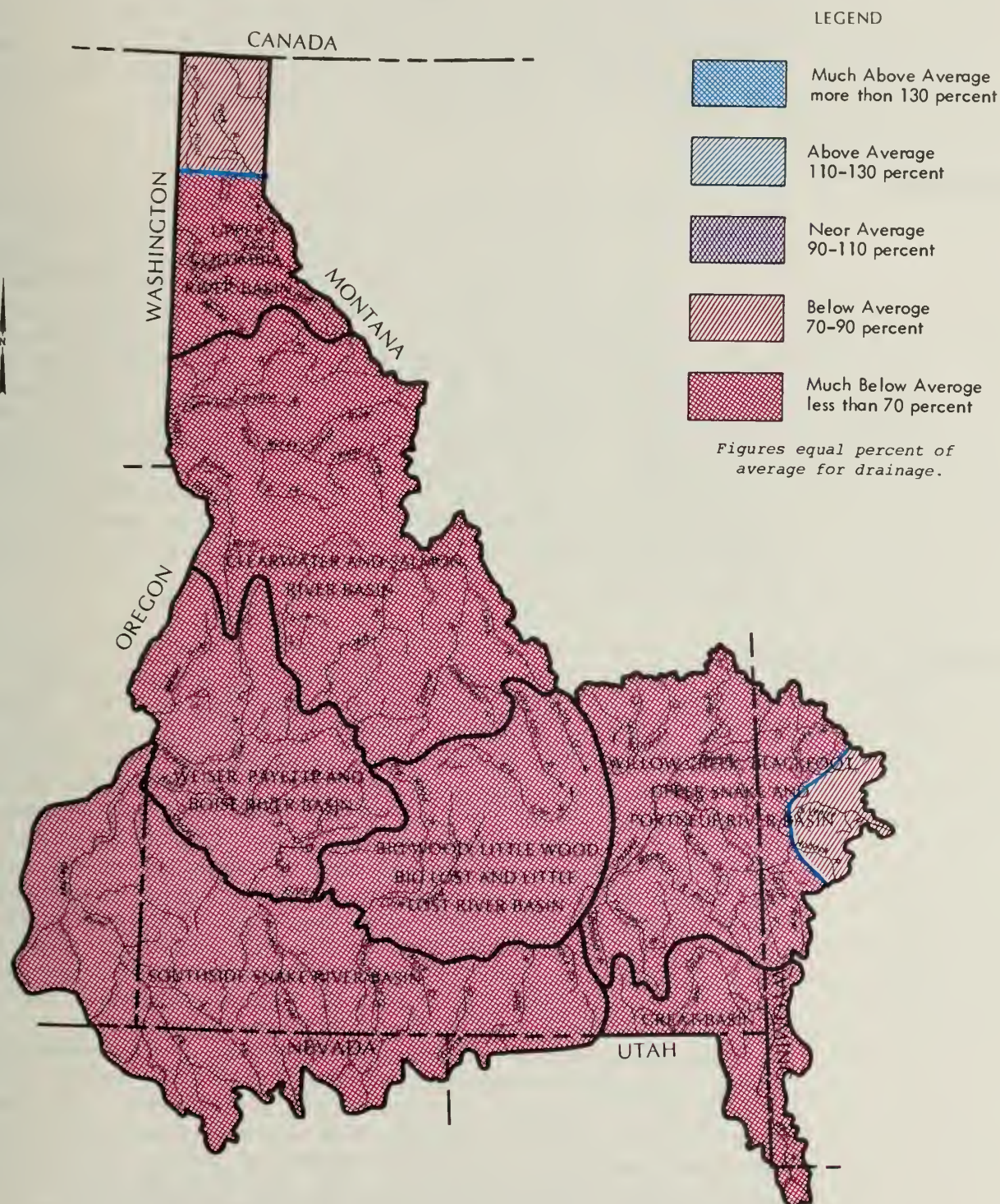
A. Kenneth Dunn
Director
State of Idaho
Department of Water Resources
Boise, Idaho

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GENERAL OUTLOOK

SUMMARY:

MUCH OF IDAHO'S MOUNTAIN SNOWPACK IS THE SECOND LOWEST ON RECORD FOR APRIL 1. STREAMFLOWS IN THE SOUTHERN HALF OF THE STATE ARE EXPECTED TO BE NEAR OR JUST ABOVE THE LOWEST ON RECORD. SOME MAJOR IRRIGATION RESERVOIRS WILL NOT FILL TO CAPACITY. IRRIGATORS WITHOUT BENEFIT OF RESERVOIR STORAGE SHOULD EXPECT WATER SHORTAGES THIS SUMMER. UNLESS SOUTHERN AND CENTRAL IDAHO RECEIVE HEAVY RAINS THIS SPRING AND SUMMER, THE WATER SUPPLY OUTLOOK FOR 1987 IS VERY BLEAK. SEE THE LAST PAGES OF THIS BULLETIN FOR SUGGESTED WATER CONSERVATION MEASURES.

SNOWPACK:

April 1 snow surveys show Idaho's snowpack conditions remain below to well below normal throughout the state. The highest snowpacks are in northern Idaho where conditions range from 57% of average on the Salmon River basin to 81% of average on the Priest River drainage. The central Idaho mountains report the lowest snowpack conditions in the state with most basins ranging from 32 to 50% of normal. Snowpacks in southern and eastern Idaho and in the upper Snake River basin in Wyoming generally range from 50 to 69% of average. Mild temperatures and rainfall during early March triggered low and middle elevation snowmelt throughout the state. If mild weather conditions continue, snowpacks are expected to melt much earlier than normal.

PRECIPITATION:

During the first two weeks of March a warm moist southwesterly flow prevailed over the state. Almost all of March's precipitation fell during this period, with some valley stations reporting 24 hour totals in the one-half to one inch range. This pattern changed by midmonth to a dry and unusually cold northwesterly flow. With the change in airflow, the precipitation ended with only light and spotty amounts being reported during the last two weeks. The Panhandle received the most rain with Porthill reporting 200% of normal. Southeastern Idaho was the only part of the state reporting below normal precipitation, with Pocatello at 89% and Grace at 78% of normal. The state as a whole reported 125% of normal precipitation for the month of March. Temperatures were unusually high during the first two weeks of March with several record highs being set. By the end of the month, record lows were being recorded. On the average, the state ended up above normal for the month. The southeast had the highest departure from normal temperatures with Pocatello at plus 4 degrees.

RESERVOIRS:

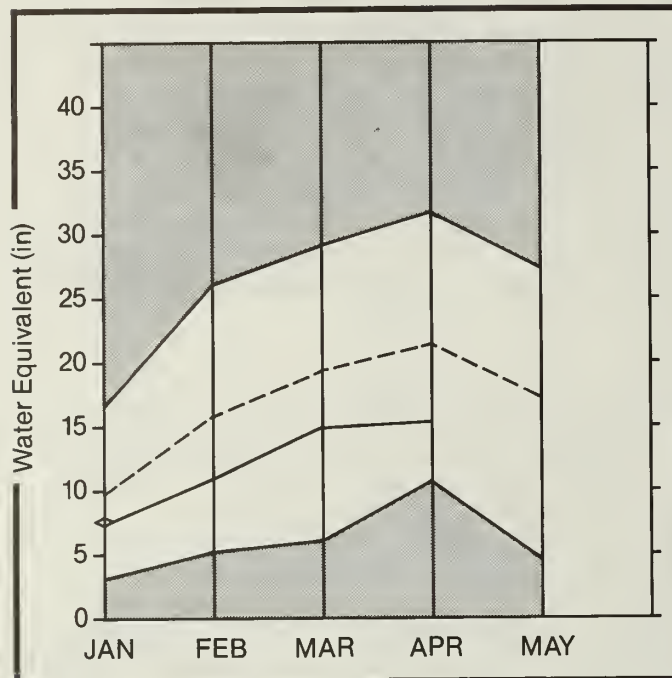
Reservoir storage across the state is generally above average for April 1, ranging from 46% of average at Lake Pend Oreille to 184% at Brownlee reservoir. For 28 reservoirs in the state, April 1 storage is 112% of normal and 70% of capacity. Most reservoirs in the state are expected to fill this spring, with the exception of the Boise system, Magic, and Carey Valley reservoirs. Irrigation demands may exceed the available storage in some reservoirs by late summer, and irrigators may experience water shortages or rationing. Stored irrigation water will be relied on heavily this summer to supplement low streamflows, drawing most reservoirs down to low levels by the end of the summer. An average or above average snowpack will be needed next winter to refill reservoirs and avoid critical water shortages in the summer of 1988.

STREAMFLOW:

Streamflow forecasts as of April 1 are near or below the levels predicted a month ago. The Little Lost River near Howe is now expected to produce the LOWEST STREAMFLOW IN THE LAST 30 YEARS for the April-September period. Forecasts across the state range from 60 to 71% in northern Idaho, 30 to 62% in central Idaho, 58 to 65% in the east, and 34 to 49% across the southern edge of the state. With snowmelt already beginning at most elevations during the first week of April, water users can expect low peak flows and a much earlier than normal return to low flow conditions. During very low snowpack years such as this one, spring rains are very important in determining the total seasonal runoff. Much above normal precipitation during May and June could improve the anticipated water supply situation significantly. The April-June weather outlook, however, calls for below normal precipitation.

Upper Columbia Basin

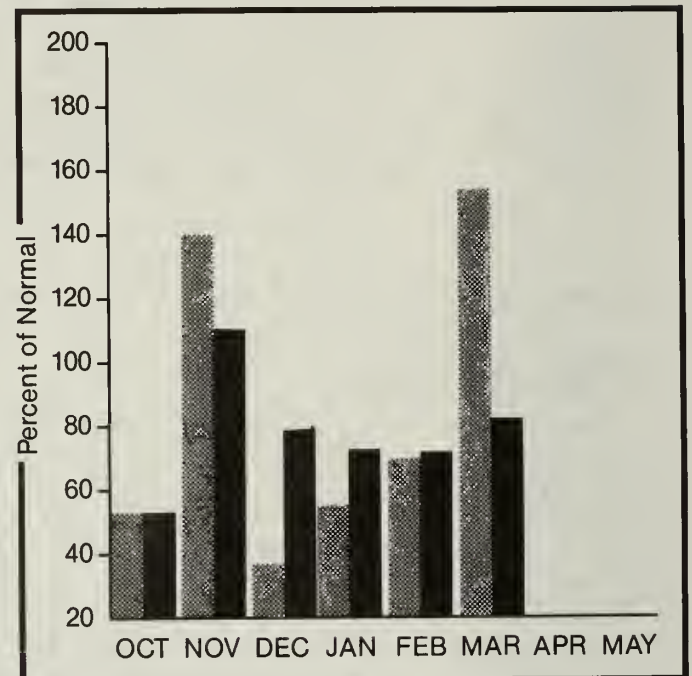
Mountain snowpack* (inches)



*Based on selected stations

Maximum ——— Average - - - - -
Minimum ——— Current ◊ ———

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation [hatched bar] Year to date precipitation [solid black bar]

WATER SUPPLY OUTLOOK:

Snowpack conditions currently range from 68% of average on the Coeur d'Alene drainage to 81% on the Priest River basin. Exceptions to this are in the lower elevation Palouse, Hayden Lake, and Rathdrum Creek drainages where snowpacks range from only 41 to 50% of normal. Precipitation amounts during March were reported to be above normal for the first time since November with valley stations reporting 81 to 254% of average and mountain SNOTEL stations reporting 97 to 162% of average. April-July streamflow forecasts remain about the same as last month, ranging from 60% of normal on the Spokane at Post Falls to 82% on the Kootenai at Leonia.

For more information contact your local Soil Conservation Service office.

UPPER COLUMBIA RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
KOOTENAI at Leona 2	APR-SEP	8441.0	6940.0	82	8540.0	101	5340.0	63
	APR-JUL	7340.0	6030.0	82	7420.0	101	4640.0	63
	APR-JUN	5899.0	4840.0	82	5960.0	101	3720.0	63
CLARK FORK at White Horse Rapids 2	APR-SEP	13370.0	9710.0	73	12400.0	93	7040.0	53
	APR-JUL	12150.0	8820.0	73	11300.0	93	6390.0	53
	APR-JUN	10360.0	7560.0	73	9630.0	93	5490.0	53
PEND OREILLE LAKE inflow 2	APR-SEP	14930.0	10500.0	70	13500.0	90	7510.0	50
	APR-JUL	13650.0	9610.0	70	12300.0	90	6880.0	50
	APR-JUN	11780.0	8260.0	70	10600.0	90	5900.0	50
PRIEST RIVER at Priest 2	APR-SEP	893.0	630.0	71	855.0	96	410.0	46
	APR-JUL	838.0	595.0	71	805.0	96	385.0	46
SPOKANE at Post Falls 2	APR-SEP	2820.0	1690.0	60	2450.0	87	930.0	33
	APR-JUL	2723.0	1630.0	60	2360.0	87	895.0	33
ST. JOE at Calder	APR-SEP	1281.0	780.0	61	1040.0	81	525.0	41
	APR-JUL	1211.0	740.0	61	980.0	81	500.0	41
COEUR D' ALENE at Enaville	APR-SEP	830.0	535.0	64	700.0	84	375.0	45
	APR-JUL	789.0	505.0	64	660.0	84	355.0	45

RESERVOIR STORAGE

(1000AF)

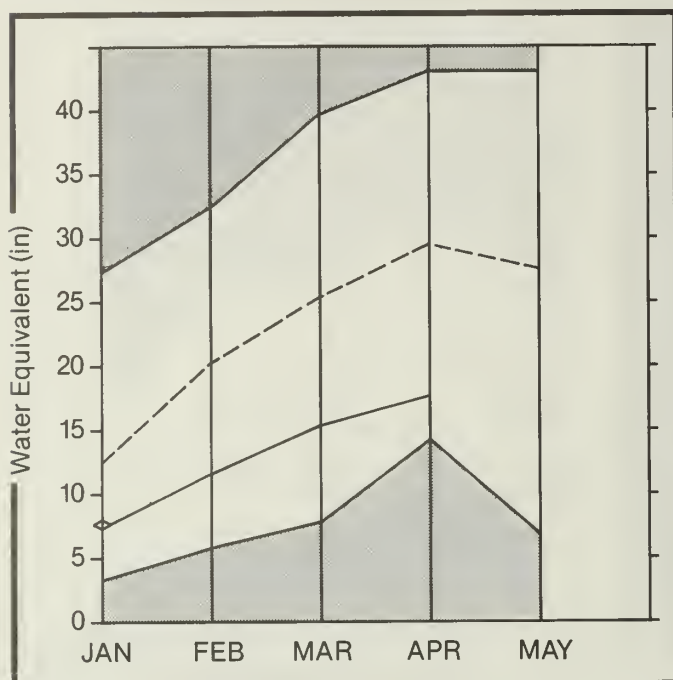
WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
HUNGRY HORSE	3451.0	2336.0	2515.0	2110.0	Kootenai ab Bonners Ferry	56	109	79
FLATHEAD LAKE	1791.0	641.0	805.3	757.2	Pend Oreille River	170	93	70
PEND OREILLE	1561.2	376.0	835.6	813.7	Clark Fork River	116	86	66
NOXON RAPIDS	335.0	326.7	299.8	213.0	Priest River	6	133	79
COEUR D'ALENE	291.2	186.2	349.2	234.3	Rathdrum Creek	1	104	77
PRIEST LAKE	97.7	57.8	34.8	39.8	Hayden Lake	4	246	50
					Coeur d'Alene River	10	121	68
					St. Joe River	10	102	72
					Spokane River	24	111	69
					Palouse River	3	81	41

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
 2 - Corrected for upstream diversions or changes in reservoir storage.
 The average is computed for the 1961-85 base period.

Clearwater and Salmon River Basin

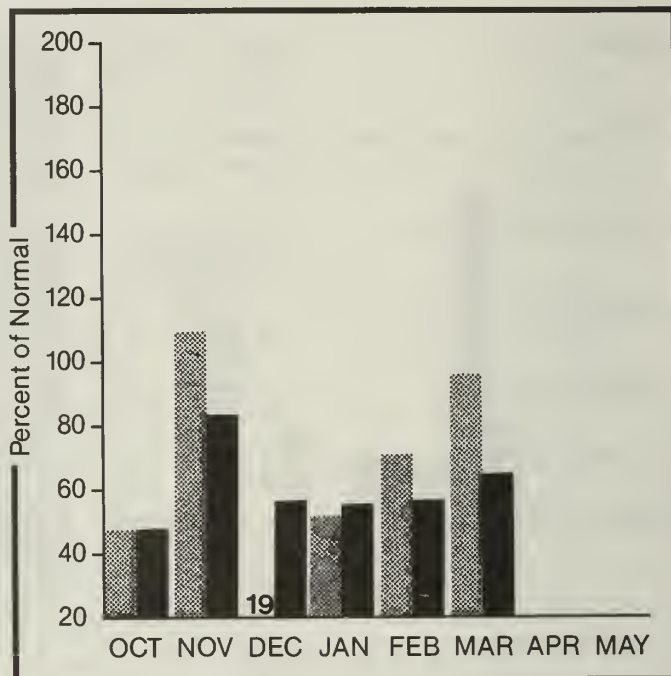
Mountain snowpack* (inches)



*Based on selected stations

Maximum ——— Average - - - - -
Minimum ——— Current ◇ ———

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation [hatched bar] Year to date precipitation [solid black bar]

WATER SUPPLY OUTLOOK:

April 1 snow measurements show little or no change in the snowpack conditions over the past month. Snowpacks remain below to well below normal, ranging from 74% of normal on the Lemhi basin to 57% on the Salmon River basin. The Clearwater River and its tributaries report 68 to 72% of average snowpack. March precipitation was near normal in the Clearwater basin and below normal in the Salmon drainage. April-July streamflow forecasts range from a low of 58% of normal on the Salmon at Whitebird to 63% on the Clearwater at Orofino.

For more information contact your local Soil Conservation Service office.

CLEARWATER AND SALMON RIVER BASIN

STREAMFLOW FORECASTS

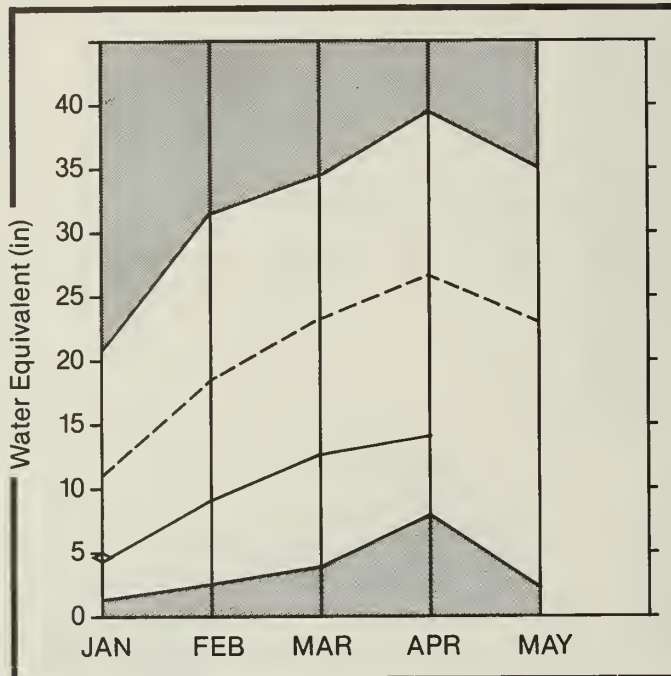
FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
CLEARWATER at Orofino	APR-SEP	5163.0	3250.0	63	4590.0	89	1910.0	37
	APR-JUL	4889.0	3070.0	63	4340.0	89	1800.0	37
CLEARWATER at Spalding	APR-SEP	8378.0	5300.0	63	7230.0	86	3460.0	41
	APR-JUL	7916.0	5000.0	63	6820.0	86	3260.0	41
DWORSHAK RESERVOIR inflow	APR-SEP	3010.0	1840.0	61	2500.0	83	1180.0	39
	APR-JUL	2822.0	1730.0	61	2350.0	83	1110.0	39
SALMON at Whitebird	APR-SEP	7007.0	4070.0	58	5610.0	80	2530.0	36
	APR-JUL	6322.0	3670.0	58	5060.0	80	2280.0	36
SALMON at Salmon	APR-SEP	1077.0	670.0	62	1040.0	97	315.0	29
	APR-JUL	919.0	570.0	62	880.0	96	270.0	29

RESERVOIR STORAGE (1000AF)		WATERSHED SNOWPACK ANALYSIS						
RESERVOIR	USEABLE CAPACITY	USEABLE STORAGE THIS YEAR	USEABLE STORAGE LAST YEAR	USEABLE STORAGE AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE	
DWORSHAK	3467.8	2830.6	2800.7	1996.2	North Fork Clearwater	15	91	69
					Lochsa River	5	89	70
					Selway River	7	87	72
					Clearwater River	23	89	69
					Salmon River ab Salmon	13	53	60
					Lemhi River	8	68	74
					Salmon River Total	34	57	58

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
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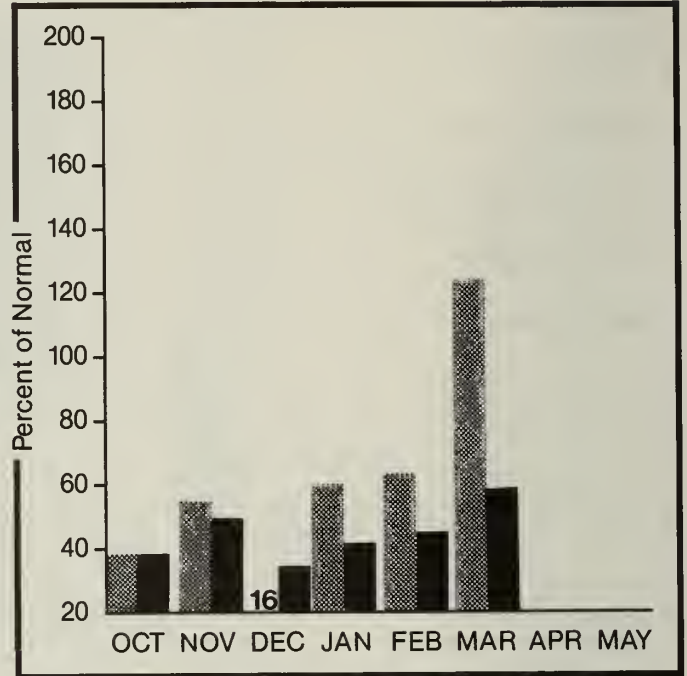
Weiser, Payette, and Boise River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum



Average



Minimum



Current



Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Mountain precipitation during March was near or slightly above normal, based on SNOTEL reports from the basin. However, this did little to improve the snowpack situation as most of the precipitation was in the form of rain. Snowpacks remain well below normal over the basin ranging from 28% of average on the Canyon Creek drainage near Mountain Home to 58% on the N. Fork Payette. Mild temperatures and rainfall caused lower and middle elevation snow to melt with most snowpacks below 5500 feet elevation being completely melted by April 1. April-July streamflows are forecast to be very low, ranging from 38 to 53% of average. The Boise River near Boise and the Weiser near Weiser are forecast to produce the second lowest volumes in over 30 years. Several reservoirs are not expected to fill, including the Boise system and Crane Creek reservoir. Water rationing may be needed where good reservoir storage is not available.

WEISER, PAYETTE AND BOISE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
WEISER nr Weiser	APR-SEP	444.0	200.0	45	385.0	87	14.0	3
	APR-JUL	414.0	188.0	45	360.0	87	14.0	3
PAYETTE nr Horseshoe 2	APR-SEP	1862.0	930.0	50	1300.0	70	560.0	30
	APR-JUL	1717.0	860.0	50	1200.0	70	520.0	30
NF PAYETTE at Cascade 2	APR-SEP	568.0	300.0	53	420.0	74	180.0	32
	APR-JUL	531.0	280.0	53	390.0	73	165.0	31
NF PAYETTE nr Banks 2	APR-SEP	737.0	375.0	51	515.0	70	235.0	32
	APR-JUL	691.0	355.0	51	485.0	70	225.0	33
SF PAYETTE at Lowman	APR-SEP	516.0	255.0	49	345.0	67	160.0	31
	APR-JUL	458.0	225.0	49	305.0	67	145.0	32
DEADWOOD RESERVOIR inflow	APR-JUL	143.0	72.0	50	96.0	67	46.0	32
BOISE RIVER nr Twin Springs 1	APR-SEP	722.0	315.0	44	440.0	61	185.0	26
	APR-JUL	664.0	290.0	44	405.0	61	170.0	26
SF BOISE at Anderson Dam 1	APR-SEP	619.0	235.0	38	355.0	57	125.0	20
	APR-JUL	578.0	220.0	38	330.0	57	115.0	20
BOISE RIVER nr Boise 1	APR-SEP	1628.0	630.0	39	955.0	59	305.0	19
	APR-JUL	1508.0	580.0	38	880.0	58	280.0	19
	APR-JUN	1334.0	510.0	38	775.0	58	245.0	18

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
MANN CREEK		NO REPORT			Mann Creek	5	56 35
CASCADE	703.2	506.5	465.0	377.6	Weiser River	9	57 43
DEADWOOD	162.0	98.0	84.7	90.8	North Fork Payette	10	66 60
ANDERSON RANCH	464.2	384.4	303.7	278.1	South Fork Payette	7	56 56
ARROWROCK	286.6	181.9	247.8	227.8	Payette River Total	16	61 58
LUCKY PEAK	307.0	218.9	36.7	153.2	Middle & North Fork Boise	9	43 50
LAKE LOWELL (DEER FLAT)	177.0	152.9	147.2	152.9	South Fork Boise River	11	40 46
					Boise River Total	20	43 47
					Canyon Creek	3	29 28

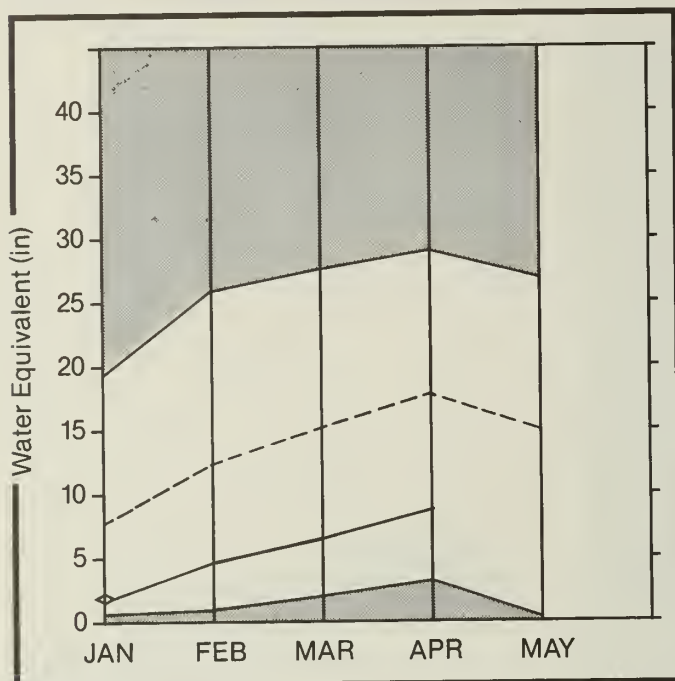
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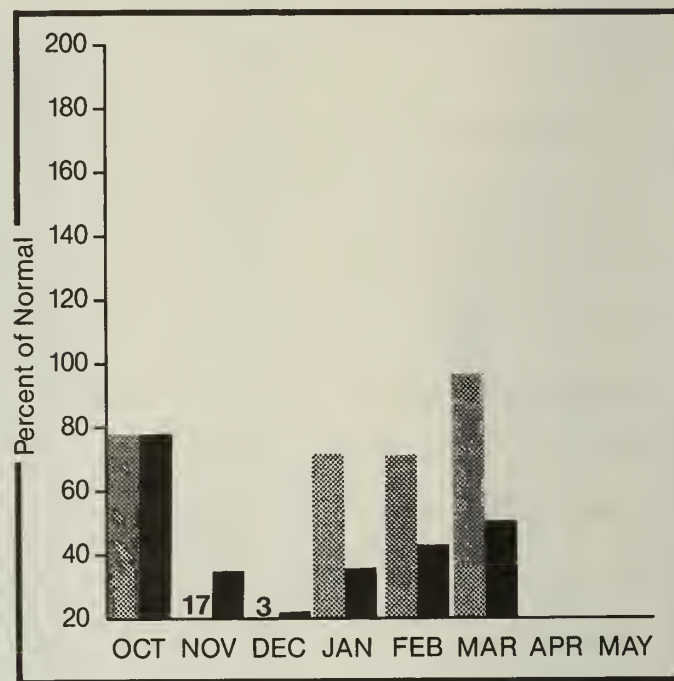
Big Wood, Little Wood, Big Lost, and Little Lost River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum ———
Minimum ———

Average - - - - -
Current ———

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

Precipitation during March was near or slightly above normal throughout the basin for the first time since September. Higher elevation snowpacks improved slightly but mild temperatures and rainfall melted much of the lower elevation snow. Most snow below 6000 feet elevation was completely melted by April 1. Basin snowpacks remain very low, ranging from 30 to 55% of average. April-July streamflows are forecast to be very low, ranging from 30 to 48% of normal. The Little Lost near Howe is forecast to produce the lowest flows in the last 30 years, with the Big Lost forecast at the second lowest. Little Wood reservoir is full as of April 1, and Mackay reservoir, currently at 87% of capacity, is also expected to fill. Carey Valley (Fish Creek) and Magic reservoirs are not expected to fill to capacity given current forecasts and anticipated irrigation demands. Water shortages or rationing can be expected this summer where good reservoir storage is not available.

BIG WOOD, LITTLE WOOD, BIG LOST AND LITTLE LOST RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BIG WOOD nr Bellevue	APR-SEP	217.0	87.0	40	145.0	67	25.0	12
	APR-JUL	202.0	81.0	40	135.0	67	25.0	12
MAGIC RESERVOIR inflow	APR-SEP	338.0	102.0	30	255.0	75	58.0	17
	APR-JUL	322.0	97.0	30	240.0	75	55.0	17
LITTLE WOOD nr Carey	APR-SEP	107.0	33.0	31	61.0	57	27.0	25
	APR-JUL	99.0	30.0	30	56.0	57	25.0	25
BIG LOST at Howell Ranch	APR-SEP	219.0	97.0	44	165.0	75	29.0	13
	APR-JUL	192.0	85.0	44	145.0	76	25.0	13
	APR-JUN	148.0	66.0	45	112.0	76	20.0	14
BIG LOST nr Mackay 2	APR-SEP	195.0	82.0	42	146.0	75	16.0	8
LITTLE LOST bl Wet Ck	APR-SEP	38.8	18.3	47	32.0	82	5.0	13
	APR-JUL	31.4	14.7	47	26.0	83	4.0	13
LITTLE LOST nr Howe	APR-SEP	44.0	21.0	48	36.0	82	6.0	14
	APR-JUL	33.0	16.0	48	27.0	82	5.0	15

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
MAGIC	191.5	145.0	149.4	117.4	Big Wood ab Magic	10	44	53
LITTLE WOOD	30.0	29.5	21.4	18.4	Camas Creek	6	31	32
CAREY VALLEY	14.4	8.8	7.6	---	Big Wood Total	15	41	48
MACKAY	44.4	38.8	31.5	33.3	Little Wood River	4	40	41
					Fish Creek	3	23	30
					Big Lost River	9	46	53
					Little Lost River	4	59	55

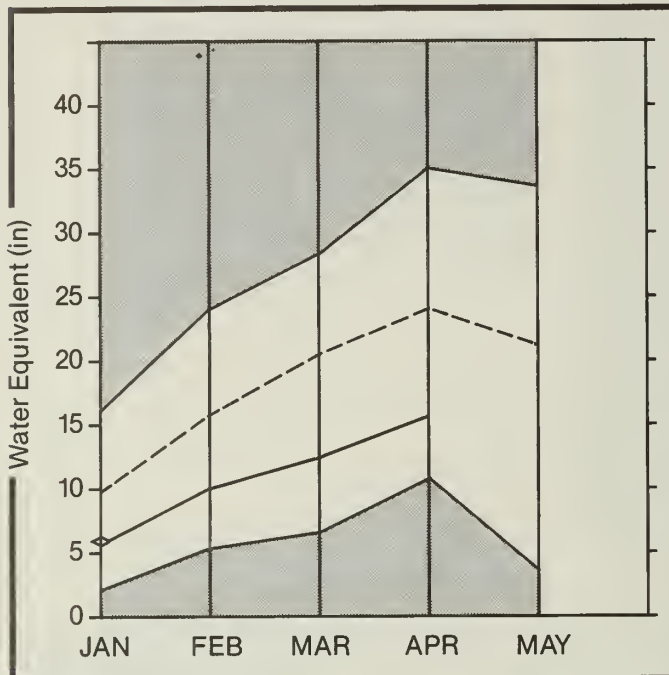
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The average is computed for the 1961-85 base period.

Willow Creek, Blackfoot, Upper Snake, and Portneuf River Basin

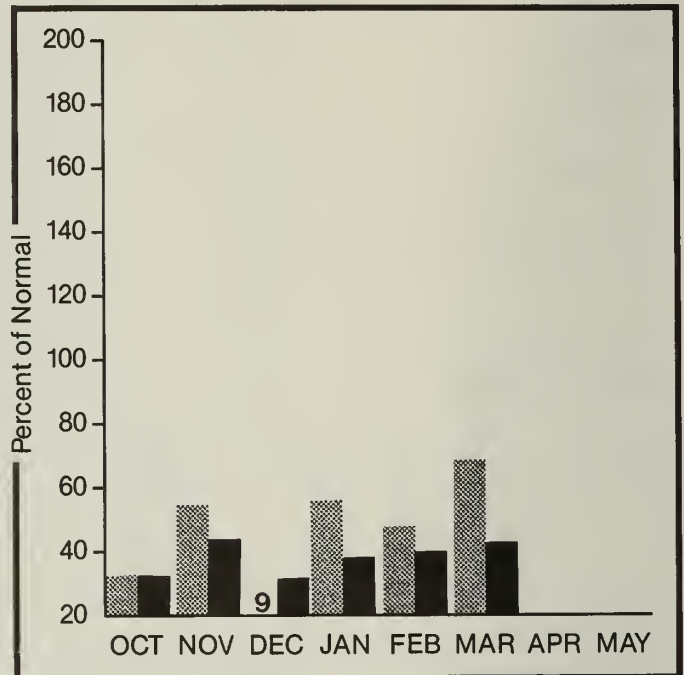
Mountain snowpack* (inches)



*Based on selected stations

Maximum ——— Average - - - - -
Minimum ——— Current ◊ ———

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation [hatched bar] Year to date precipitation [solid black bar]

WATER SUPPLY OUTLOOK:

High elevation SNOTEL sites reported below normal precipitation during March and most basin snowpack conditions remain unchanged or have decreased slightly from those reported a month ago. Most watersheds now report 50 to 65% of normal snowpack. One exception is the Gros Ventre River basin in Wyoming where the snowpack is 83% of average. Low elevation snowpacks are now beginning to melt and continued mild temperatures will bring much earlier than normal runoff. April-July streamflow forecasts are well below normal, ranging from 58% of average on the Henry's Fork near Rexburg to 65% on the Snake near Heise. Most reservoirs are nearly filled to capacity and water supplies should be adequate from most water users during the summer irrigation season.

For more information contact your local Soil Conservation Service office.

WILLOW CREEK, BLACKFOOT, UPPER SNAKE AND PORTNEUF RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
HENRY'S FORK nr Ashton 2	APR-SEP APR-JUL	746.0 557.0	460.0 345.0	62 62	520.0 390.0	70 70	395.0 295.0	53 53
HENRY'S FORK nr Rexburg 2	APR-SEP APR-JUL	1595.0 1260.0	915.0 725.0	57 58	1170.0 930.0	73 74	660.0 525.0	41 42
FALLS RIVER nr Squirrel	APR-JUL	373.0	230.0	62	290.0	78	165.0	44
TETON RIVER ab S Leigh Ck	APR-SEP APR-JUL	194.0 145.0	120.0 90.0	62 62	145.0 109.0	75 75	95.0 71.0	49 49
TETON nr St. Anthony	APR-SEP APR-JUL	479.0 387.0	295.0 240.0	62 62	350.0 285.0	73 74	240.0 195.0	50 50
SNAKE at Moran 1	APR-SEP	888.0	600.0	68	745.0	84	460.0	52
PALISADES LAKE inflow 1	APR-SEP	3852.0	2500.0	65	3270.0	85	1730.0	45
SNAKE nr Heise 2	APR-SEP APR-JUL	4142.0 3524.0	2700.0 2300.0	65 65	3530.0 3010.0	85 85	1910.0 1630.0	46 46
SNAKE nr Blackfoot 2	APR-SEP APR-JUL	5680.0 4589.0	3580.0 2880.0	63 63	4545.0 3660.0	80 80	2670.0 2150.0	47 47
PORTNEUF at Topaz	MAR-SEP MAR-JUL	109.0 88.0	57.0 46.0	52 52	94.0 76.0	86 86	20.0 16.0	18 18

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
ISLAND PARK	127.6	134.2	95.9	119.3	Camas-Beaver Creeks	4	73 59
GRASSY LAKE	15.2	13.3	12.9	11.2	Henry's Fork River	13	55 57
JACKSON LAKE	624.4	113.4	148.8	525.9	Teton River	6	57 65
PALISADES	1357.0	1323.2	1068.4	968.2	Snake above Palisades	32	52 63
AMERICAN FALLS	1700.0	1630.9	1094.9	1452.5	Snake above Jackson Lake	10	47 55
BROWNLEE	975.3	824.8	895.8	449.1	Gros Ventre River	3	65 83
BLACKFOOT		NO REPORT			Greys River	4	48 57
HENRY'S LAKE	90.4	83.3	---	80.1	Salt River	5	52 58
RIRIE	96.5	58.3	---	53.1	Willow Creek	11	73 64
					Blackfoot River	10	50 57
					Portneuf River	13	49 50
					Toponce Creek	3	51 45

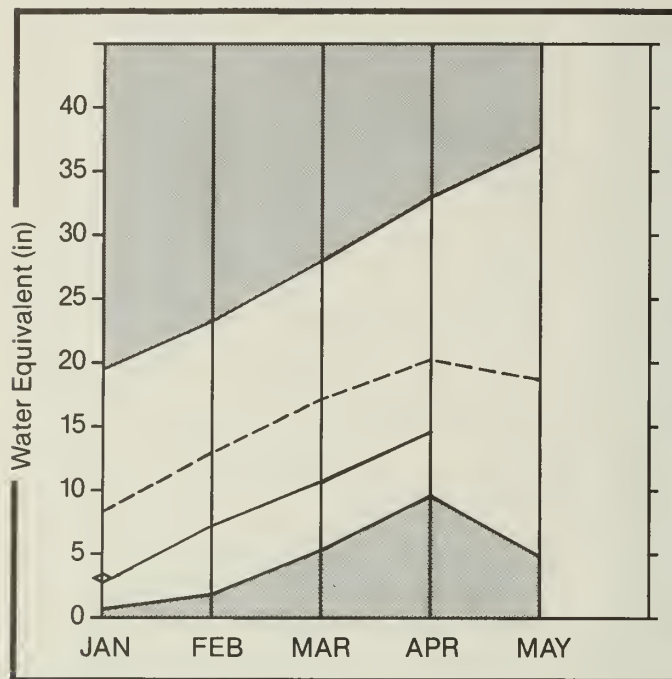
1 - Feas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

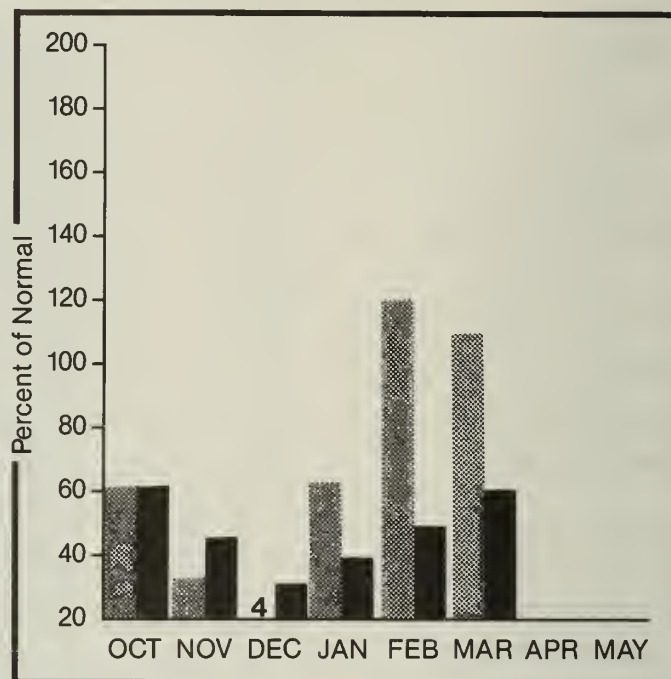
Southside Snake River Basin

Mountain snowpack* (inches)







*Based on selected stations


Precipitation* (percent of normal)




*Based on selected stations

Maximum 
Minimum 

Average 
Current 

Monthly precipitation 

Year to date precipitation 

WATER SUPPLY OUTLOOK:

Near to slightly below normal mountain precipitation during March did little to improve the snowpack in the basin. The higher elevation snowpack in the Jarbidge area improved slightly while the lower elevation snowpacks on the Owyhee and Raft River drainages showed a decrease in comparison to normal. Mild temperatures and rainfall in early March have depleted much of the snow below 6000 feet. Snowpacks currently range from 56 to 69% of average throughout the basin. Streamflow forecasts are well below normal ranging from 36 to 49% of average. Reservoir storage is good in all major reservoirs, ranging from near normal in Owyhee and Oakley reservoirs to well above normal in Salmon Falls reservoir. Water supplies should be adequate this summer for irrigators having access to stored water. Water shortages could be experienced by mid to late summer on drainages without storage facilities.

SOUTHSIDE SNAKE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
OAKLEY RESERVOIR inflow	APR-SEP	33.0	12.2	37	24.0	73	2.0	6
	APR-JUL	29.7	10.8	36	22.0	74	2.0	7
SALMON FALLS CK nr San Jacinto	MAR-SEP	102.0	41.0	40	78.0	76	4.0	4
	MAR-JUL	97.0	39.0	40	74.0	76	4.0	4
	MAR-JUN	91.0	36.0	40	69.0	76	3.0	3
BRUNEAU nr Hot Spring	MAR-SEP	260.0	104.0	40	200.0	77	8.0	3
	MAR-JUL	248.0	99.0	40	191.0	77	7.0	3
OWYHEE RIVER nr Gold Creek 2	APR-JUL	27.8	11.0	40	26.0	94	3.0	11
OWYHEE RIVER nr Owyhee 2	APR-JUL	86.0	36.0	42	76.0	88	11.0	13
OWYHEE LAKE inflow 1	APR-SEP	455.0	220.0	49	397.0	87	39.0	9
	APR-JUL	427.0	210.0	49	376.0	88	40.0	9
OWYHEE at Rome 2	APR-JUL	376.0	180.0	48	349.0	93	11.0	3

RESERVOIR STORAGE		(1000AF)			WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
OAKLEY	77.4	34.8	44.3	34.0	Raft River	9	57	64
SALMON FALLS	182.6	99.7	108.7	62.3	Goose-Trapper Creeks	5	52	62
OWYHEE	715.0	565.9	706.1	560.6	Salmon Falls Creek	12	76	68
					Bruneau River	11	74	69
					Owyhee River	19	74	66

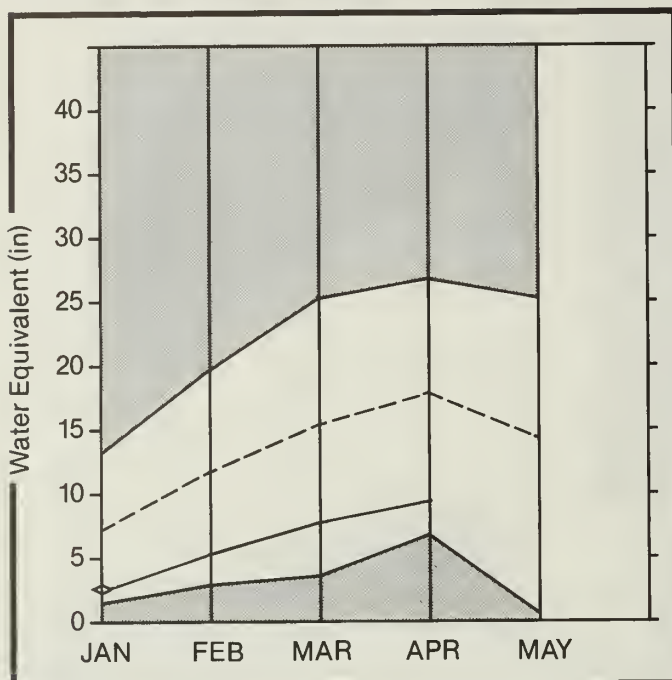
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2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

Great Basin

Mountain snowpack* (inches)



*Based on selected stations

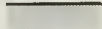
Maximum



Average



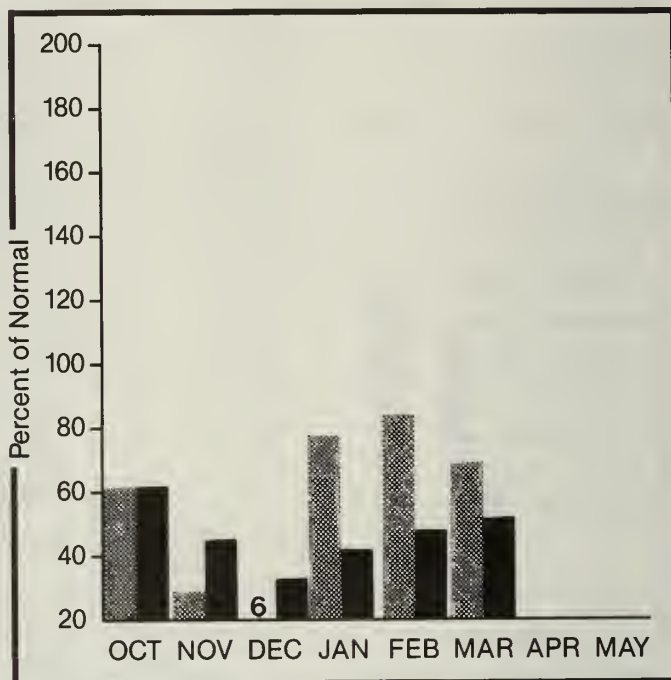
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

March precipitation was below normal for the sixth consecutive month. Basin snowpack conditions have not changed significantly from those reported last month and remain well below average. Currently, snowpacks range from 44 to 63% of average on all basins except the Malad River drainage which reports only 31% of normal snowpack. Spring and summer streamflows are forecast to be well below normal ranging from 34 to 43% of average. If the pattern of below normal precipitation continues, water supplies could be inadequate for some users - particularly those not having the benefit of reservoir storage facilities.

For more information contact your local Soil Conservation Service office.

GREAT BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BEAR at Harer	APR-SEP	310.0	110.0	35	178.0	57	42.0	14
MONTPELIER CK nr Montpelier	APR-SEP	13.9	4.8	34	10.0	72	1.0	7
CUB RIVER nr Preston	APR-SEP	51.8	22.3	43	44.0	85	12.0	23
	APR-JUL	46.8	20.1	43	40.0	85	6.0	13

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
BEAR LAKE	1421.0	1086.2	1089.0	1002.1	Bear River (above Harer)	11	48	64
MONTPELIER CREEK	3.9	2.5	1.8	1.6	Montpelier Creek	7	37	54
					Mink Creek	8	37	44
					Cub River	4	56	51
					Malad River	7	35	31

1 - Feas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

SNOW DATA MEASUREMENTS

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
UPPER COLUMBIA BASIN							WATERSHED I						
ABOVE BURKE	4100	3/31/87	38	13.6	15.1	22.6	MORGAN CREEK	7600	3/28/87	30	7.1	16.1	14.3
ABOVE ROLAND	4350	3/30/87	61	25.6	24.6	33.1	MORGAN CREEK PILLOW	7600	4/01/87	---	7.1	13.8	13.9
BEAR MOUNTAIN	5400	4/01/87	---	53.0E	33.4	61.1	MORSE CREEK SAWMILL	7120	3/28/87	28	7.0	12.0	9.4
BEAR MTN PILLOW	5400	4/01/87	---	53.7	37.7	62.6	MOUNTAIN MEADOWS	6360	3/30/87	50	14.3	17.0	23.8
BELOW ROLAND	3920	3/31/87	33	12.0	4.8	14.5	MOUNTAIN MEADOWS PILLOW	6360	4/01/87	57	15.9	18.9	26.2
BENTON MEADOW	2370	3/31/87	0	.0	.0	4.2	NE2 PERCE PASS	6570	3/27/87	35	10.6	14.9	17.8
BENTON SPRING	4920	3/31/87	37	13.6	8.1	19.4	PERREAU MEADOWS	8500	3/27/87	40	10.3	17.6	17.8
BOYER MOUNTAIN	5250	3/30/87	54	20.4	19.7	26.6	PIERCE R.S.	3080	3/30/87	15	5.0	6.3	8.9
BREEZY SADDLE	5010	3/27/87	63	21.7	20.3	32.8	ROEFISH LAKE FLAT	6560	4/03/87	14	6.2	13.8	12.4
BUNCHGRASS MEADOWS	5000	3/30/87	66	24.2	17.4	30.4	ROCK FLAT SUMMIT	5310	3/29/87	33	11.6	13.8	19.1
BUNCHGRASS MOWPILLOW	5000	4/01/87	---	24.9	19.4	27.2	SADOLE MOUNTAIN	7940	3/26/87	51	15.9	24.5	26.2
CHILCO RIDGE	3650	4/02/87	0	.0	.0	5.0	SADOLE MTN PILLOW	7900	4/01/87	---	15.6	24.5	27.3
CONIE RIDGE	3900	4/02/87	0	.0	.0	6.2	SAVAGE PASS	6170	4/01/87	50	18.4	24.6	27.3
COPPER RIDGE	4820	4/01/87	43	19.0	8.6	27.2	SAVAGE PASS PILLOW	6170	4/01/87	---	18.0	24.7	29.0
CORNER CREEK	3150	4/02/87	15	5.4	.0	6.1	SCHWARTZ LAKE	8540	3/29/87	41	11.1	15.8	13.5
EAST RAGGED SADDLE	3740	4/02/87	31	12.6	.0	21.0	SECESH SUMMIT	6520	3/29/87	60	21.0	34.9	36.8
EAST TWIN	4130	3/31/87	4	1.4	2.7	8.8	SECESH SUMMIT PILLOW	6520	4/01/87	---	20.6	32.6	37.3
FORTY-NINE MEADOWS	4830	3/27/87	57	19.3	17.0	31.2	SECHSH SUMMIT	4570	3/27/87	57	18.1	18.0	26.5
FOURTH OF JULY SUM	3200	3/31/87	0	.0	.0	7.3	SHANGHAI SUMMIT	4570	4/01/87	56	19.3	17.0	27.9
GRANITE PEAK	6000	3/30/87	90	31.2	31.4	45.4	SHANGHAI SUM PILLOW	3200	4/01/87	15	4.8	6.5	12.1
HUMBOLDT GULCH	4250	3/31/87	26	8.4	10.5	16.8	SHERWIN	3200	4/01/87	---	5.1	5.4	11.4
HUMBOLDT GLCH PILLOW	4250	4/01/87	---	8.5	5.6	15.8	SLAG-A-MELT LAKE	8750	3/30/87	46	13.0	24.6	27.0
KELLOGG PEAK AM	5560	3/30/87	60	24.4	21.2	32.9	SOUAW MEADOW	5900	3/29/87	55	19.8	35.0	37.0
LOOKOUT	5140	3/31/87	63	25.0	26.2	35.1	TWIN LAKES	6510	3/30/87	80	30.4	34.4	42.8
LOOKOUT PILLOW	5140	4/01/87	---	25.3	25.7	33.6	TWIN LAKES PILLOW	6400	4/01/87	---	29.5	31.4	42.5
LOST LAKE	6110	3/27/87	119	44.6	43.3	59.3	TWIN PEAKS	9190	4/01/87	48	15.1	25.0	25.9
LOST LAKE PILLOW	6110	4/01/87	---	51.6	49.7	66.1	VIENNA MINE	8960	4/01/87	61	21.1	48.7	37.9
LOWER SANDS CREEK	3120	4/01/87	40	14.4	11.9	20.0	VIENNA MINE PILLOW	8960	4/01/87	---	19.1	43.8	37.8
MOSCOW MOUNTAIN	4410	3/31/87	34	12.3	14.3	17.2	WEST BRANCH	5560	4/02/87	29	11.0	20.8	25.6
MOSQUITO RIDGE	5200	3/30/87	77	30.2	21.6	38.2	WEST BRANCH PILLOW	5560	4/01/87	---	14.4	21.2	25.7
MOSQUITO PILLOW	5200	4/01/87	---	29.8	22.0	38.7							
RAGGED RIDGE	3330	3/30/87	0	.0	.0	---	WEISER, PAYETTE AND BOISE BASINS						
ROLAND SUMMIT	5120	3/30/87	72	30.2	23.6	38.2	WATERSHED III						
SAGE CREEK SADDLE	4080	4/02/87	32	12.3	7.2	18.4	ATLANTA SUMMIT	7600	4/01/87	57	18.6	40.6	35.6
SCHWEITZER BASIN	6090	3/29/87	108	38.4	31.1	47.8	ATLANTA SUM PILLOW	7580	4/01/87	---	18.5	39.5	32.6
SCHWEITZER BN PILLOW	6090	4/01/87	---	46.3	33.7	50.2	ATLANTA TOWNSITE	5370	3/31/87	11	4.1	7.1	---
SCHWEITZER BOWL	4800	3/31/87	57	23.0	16.6	30.5	BANNER SUMMIT	7040	3/31/87	49	17.1	33.3	30.8
SCHWEITZER RIDGE	6200	3/31/87	111	45.9	32.3	47.9	BANNER SUMMIT PILLOW	7040	4/01/87	---	15.6	31.3	27.9
SHERWIN	3200	4/01/87	15	4.8	6.5	12.1	BAD BEAR	4940	4/01/87	11	4.0	12.0	13.4
SHERWIN PILLOW	3200	4/01/87	---	5.1	5.4	11.4	BEAR BASIN	5350	3/29/87	35	12.0	17.1	20.1
SKITWISH RIDGE	5110	4/01/87	58	23.9	15.9	33.2	BEAR BASIN PILLOW	5350	4/01/87	---	11.3	17.4	20.3
SMITH CREEK	4800	3/30/87	83	33.8	28.2	46.4	BEAR SADDLE	6180	3/31/87	36	13.0	21.0	31.4
SUNSET	5540	3/30/87	61	21.4	17.8	33.5	BEAR SADDLE PILLOW	6180	4/01/87	---	13.3	22.4	31.6
SUNSET PILLOW	5540	4/01/87	---	28.0	26.1	35.8	BENNETT MOUNTAIN	6560	3/29/87	29	8.9	22.8	18.1
WEST TWIN	4220	3/31/87	0	.0	.0	7.5	BENNETT MTN PILLOW	6560	4/01/87	---	10.3	---	20.0
CLEARWATER AND SALMON BASINS							BIG CREEK SUMMIT	6580	4/02/87	58	19.5	40.8	37.5
ABOVE GILMORE	8200	3/29/87	32	7.6	12.1	10.3	BIG CREEK SUM PILLOW	6580	4/01/87	---	20.5	43.0	33.9
ASPEN-HALL PASS AM	8200	3/26/87	36	6.7	12.4	10.5	BOGUS BASIN	6340	4/01/87	41	13.8	25.3	25.2
BANNER SUMMIT	7040	3/31/87	49	17.1	33.3	30.8	BOGUS BASIN ROAD	5540	4/01/87	0	.0	.0	2.2
BANNER SUMMIT PILLOW	7040	4/01/87	---	15.6	31.3	27.9	BOULDER CREEK	5440	4/02/87	22	7.6	17.4	23.6
BEAR BASIN	5350	3/29/87	35	12.0	17.1	20.1	BRUNDAGE MOUNTAIN	7550	4/01/87	---	23.0E	44.4	48.3
BEAR BASIN PILLOW	5350	4/01/87	---	11.3	17.4	20.7	BRUNDAGE RESV PILLOW	4500	4/01/87	---	16.0	---	---
BIG CREEK SUMMIT	6580	4/02/87	58	19.5	40.8	37.5	CAMAS CREEK DIVIDE	5710	3/29/87	0	.0	7.5	10.2
BIG CREEK SUM PILLOW	6580	4/01/87	---	20.5	43.0	33.9	CHIMNEY CREEK	6400	3/29/87	16	5.3	15.1	13.4
BORAW	6200	4/01/87	24	5.5	8.2	6.1	COUCH SUMMIT	6840	3/29/87	26	7.9	22.7	18.8
BOULDER CREEK	5440	4/02/87	22	7.6	17.4	23.6	COZY COVE	5380	3/31/87	18	7.0	10.1	15.8
BREEZY SADDLE	5010	3/27/87	63	21.7	20.3	32.8	COZY COVE PILLOW	5380	4/01/87	---	9.0	14.1	23.9
BRUNDAGE MOUNTAIN	7560	4/01/87	---	23.0E	44.4	46.3	CRAWFORD R.S.	4860	3/28/87	0	.0	.0	5.7
BUCK MEADOWS	5650	3/30/87	63	23.2	24.8	30.7	DEADMAN GULCH	5600	3/27/87	30	13.0	16.8	16.8
CAYUSE AIRSTRIP	3500	3/30/87	13	5.0	6.3	8.7	DEADWOOD AIRSTRIP	5360	4/01/87	---	8.6E	11.7	15.3
COOL CREEK	6250	3/30/87	104	36.5	40.1	52.7	DEADWOOD SUMMIT	6860	3/31/87	72	26.9	49.4	46.4
COOL CREEK PILLOW	6280	4/01/87	---	36.4	41.2	49.6	DEADWOOD SUM PILLOW	6860	4/01/87	---	26.4	51.2	52.2
COOLWATER MOUNTAIN	6030	3/30/87	85	29.6	31.5	34.9	DOLLARHIDE SUMMIT	8420	4/01/87	46	14.0	31.6	25.4
COPE'S CAMP	7520	3/29/87	26	5.6	9.7	8.7	DOLLARHIDE SM PILLOW	8420	4/01/87	---	14.7	34.5	26.0
CRATER MEADOWS	5960	3/30/87	85	31.6	25.4	45.4	GRAHAM GUARD STATION	5690	3/31/87	21	7.9	13.5	15.5
CRATER MOWS PILLOW	5960	4/01/87	---	32.7	24.7	48.0	GRAHAM G.S. PILLOW	5690	4/01/87	---	5.3	16.7	17.7
CROOKED FORK	3610	4/01/87	18	5.0	7.6	12.4	IDAHO CITY TOWNSITE	4000	4/01/87	0	.0	.0	1.4
DEADWOOD SUMMIT	6860	3/31/87	72	26.9	49.4	46.4	JACKSON PEAK	7070	3/31/87	48	16.0	36.8	32.2
DEADWOOD SUM PILLOW	6860	4/01/87	---	26.4	51.2	52.2	JACKSON REAR PILLOW	7070	4/01/87	---	16.8	38.8	31.0
DOUBLE SPGS PASS AM	8380	3/28/87	29	7.5	14.3	10.8	LAKE FORK	5290	3/28/87	41	16.4	15.6	16.2
ELK BUTTE	5550	3/27/87	68	24.3	26.8	37.4	LITTLE CAMAS FLAT	4940	3/29/87	0	.0	.0	4.0
ELK BUTTE PILLOW	5650	4/01/87	---	27.4	28.6	42.0	MANN CREEK	6080	3/31/87	38	15.4	23.4	26.6
FISH LAKE AIRSTRIP	5650	3/30/87	82	29.6	32.1	40.0	MOORE'S CREEK SUMMIT	6100	4/01/87	49	18.1	42.8	33.0
FORTY-NINE MEADOWS	4830	3/27/87	57	19.3	17.0	31.2	MOORE'S CA SUM PILLOW	6100	4/01/87	---	16.9	45.8	35.2
GALENA SUMMIT	8780	3/30/87	46	14.0	28.8	24.4	PLACER CREEK	5860	3/31/87	39	16.4	25.2	18.9
GALENA SUMMIT PILLOW	8780	4/01/87	---	12.8	22.3	19.6	PRAIRIE	4800	3/30/87	0	.0	.0	2.9
GIBBONS PASS	7100	3/26/87	44	13.6	21.2	24.0	PRAIRIE PILLOW	4800	4/01/87	---	.0	.0	---
GOAT LAKE	6500	3/											

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
BIG WOOD, LITTLE WOOD, BIG LOST AND LITTLE LOST BASINS							WATERSHED IV						
BEAR CANYON	7900	3/31/87	36	10.4	22.7	19.3	LATHAM SPRINGS	7630	3/30/87	50	18.0	35.0	33.8
BEAR CANYON PILLOW	7900	4/01/87	---	8.9	21.8	17.3	LAVA CREEK	7350	3/30/87	30	10.1	16.8	15.1
BENNETT MOUNTAIN	6560	3/29/87	29	8.9	22.8	18.1	LEWIS LAKE DIVIDE	7850	3/31/87	61	22.6	52.2	42.7
BENNETT MTN PILLOW	6560	4/01/87	---	10.3	---	20.0	LOWER PEBBLE	5780	3/26/87	17	5.4	13.8	13.4
CAMAS CREEK DIVIDE	5710	3/29/87	0	.0	7.5	10.2	LUCKY DOG	6860	3/30/87	44	15.2	27.6	34.4
CHIMNEY CREEK	6400	3/29/87	16	5.3	15.1	13.4	MADISON PLATEAU	7750	3/25/87	50	14.9	28.7	24.1
COPPER BASIN	7640	3/31/87	15	4.2	12.0	10.5	MC RENDOLDS RESERVOIR	6720	3/30/87	31	10.7	16.4	19.2
COUCH SUMMIT	6840	3/29/87	26	7.9	22.7	18.8	MINK CREEK	6410	3/27/87	32	10.9	19.8	20.2
DOLLARHIDE SUMMIT	8420	4/01/87	46	14.0	31.6	25.4	MORAN	6750	3/30/87	24	8.1	15.1	12.9
DOLLARHIDE SM PILLOW	8420	4/01/87	---	14.7	34.5	26.0	MUD CREEK	7100	3/30/87	46	16.1	24.6	19.8
DRY FORA	7220	3/27/87	21	6.3	20.0	16.3	NORTH PUTNAM	7240	4/01/87	47	15.9	28.8	29.0
FISHPOLE LAKE	9300	3/31/87	41	13.4	32.7	22.1	PACKSADDLE SPRING	8200	3/30/87	53	18.4	35.6	30.3
GALENA	7440	4/01/87	---	10.4E	22.8	19.0	PEBBLE CREEK	6550	3/26/87	23	7.3	15.0	16.4
GALENA PILLOW	7440	4/01/87	---	9.8	23.1	18.8	PHILLIPS BENCH	8200	3/31/87	62	20.0	40.8	30.5
GALENA NEW	7470	3/30/87	38	11.3	25.5	21.3	PHILLIPS BENCH PILL.	8200	4/01/87	---	17.4	37.8	29.0
GALENA SUMMIT	8780	3/30/87	46	14.0	28.8	24.4	PINE CREEK PASS	6810	4/01/87	28	10.2	14.9	17.8
GALENA SUMMIT PILLOW	8780	4/01/87	---	12.8	23.3	19.6	POISON MEADOWS	8500	3/30/87	61	17.7	40.7	29.6
GARFIELD R.S.	6560	3/31/87	7	2.5	9.8	10.3	PUTNAM	7220	3/26/87	35	10.5	23.3	21.4
GARFIELD R.S. PILLOW	6560	4/01/87	---	4.5	13.5	10.4	SALT RIVER SUMMIT	7700	3/30/87	31	9.2	22.8	16.5
GRAHAM RANCH	6270	3/30/87	23	7.1	18.2	14.5	SALT RIVER PILLOW	7700	4/01/87	---	7.6	21.1	16.2
HILTS CREEK	8000	3/31/87	29	7.8	14.0	11.6	SAWTELL MOUNTAIN	8720	3/31/87	70	23.7	42.9	36.5
HILTS CREEK PILLOW	8000	4/01/87	---	8.3	15.1	13.5	SEDEGWICK PEAK	7850	3/27/87	35	9.0	28.8	18.6
HYNDMAN CREEK	7440	3/31/87	26	8.1	17.3	14.5	SHEEP MOUNTAIN	6570	3/30/87	21	7.8	11.8	14.1
HYNDMAN PILLOW	7440	4/01/87	---	8.3	17.4	13.2	SHEEP MTN PILLOW	6570	4/01/87	---	8.0	11.3	16.6
IRON Bdg	7650	3/30/87	18	5.8	13.1	13.5	SLUG CREEK DIVIDE	7230	3/31/87	26	8.8	22.9	17.6
IRON MINE CREEK	6300	4/02/87	11	4.0	16.0	11.1	SLUG CK DVO PILLOW	7230	4/01/87	---	9.1	24.3	20.0
LEADBELT	6700	3/27/87	12	3.9	7.6	9.4	SNAKE RIVER STATION	6920	3/31/87	36	11.8	24.7	21.5
LEATHERMAN PASS	9860	4/01/87	60	18.6	24.6	24.8	SNOW KING MTN	7660	3/30/87	34	10.6	19.3	15.5
LITTLE CAMAS FLAT	4940	3/29/87	0	.0	.0	4.0	SOMSEN RANCH	6840	3/30/87	30	9.5	18.6	15.1
LOST-WOOD DIVIDE	7900	3/31/87	40	12.0	30.3	24.0	SOMSEN RANCH PILLOW	6800	4/01/87	---	7.7	14.7	14.8
LOST-WOOD DVO PILLOW	7900	4/01/87	---	11.4	31.2	25.3	SPRING CRK. PILLOW	9000	4/01/87	---	17.1	42.0	23.8
MASCOT MINE	7780	3/31/87	26	7.2	18.7	15.4	STATE LINE	6660	4/01/87	29	10.4	16.3	15.0
MOONSHINE	7440	3/30/87	19	5.1	8.8	10.7	SULPHUR PEAK	7070	3/30/87	27	9.2	20.4	16.9
MOONSHINE PILLOW	7440	4/01/87	---	6.3	11.7	11.4	TARGHEE PASS	6980	4/01/87	---	9.8E	11.2	16.1
MOUNT BALDY	8920	3/27/87	48	11.0	23.8	21.7	TETON PASS W.S.	7740	3/31/87	63	21.4	36.8	26.8
MULDODD	6320	3/31/87	4	1.2	2.7	6.9	TEX CREEK	6650	4/01/87	---	4.7E	6.4	10.2
SAWMILL CANYON	7000	3/30/87	15	4.5	5.8	7.9	THUMB DIVIDE	7980	3/31/87	38	10.8	27.8	21.2
SOLDIER R.S.	5740	3/29/87	5	2.2	11.3	10.6	TOGWOTEE PASS	9580	3/30/87	76	25.3	35.6	30.0
SOLDIER R.S. PILLOW	4330	4/01/87	---	2.2	---	---	TOGWOTEE PASS PILLOW	9580	4/01/87	---	20.4	30.6	25.7
STICKNEY MILL	7430	3/31/87	17	5.5	11.3	10.4	TOPDNCE	6160	3/26/87	17	5.6	7.8	17.1
STICKNEY MILL PILLOW	7430	4/01/87	---	4.2	10.7	.0	TURPIN MEADOWS	6900	3/30/87	24	9.0	10.8	10.4
SWEDE PEAK	7640	4/01/87	29	8.4	21.4	18.3	TWITCHELL CANYON	6300	4/01/87	29	9.2	10.2	16.9
SWEDE PEAK PILLOW	7640	4/01/87	---	8.1	20.3	16.4	TWO OCEAN PILLOW	9160	4/01/87	---	19.0	---	28.8
TELFER RANCH	5840	4/01/87	0	.0	8.7	7.0	VALLEY VIEW	6680	3/31/87	33	11.0	12.4	17.7
VIENNA MINE	8960	4/01/87	61	21.1	48.7	37.9	WEBBER CREEK	6700	3/28/87	18	4.8	6.0	6.0
VIENNA MINE PILLOW	8960	4/01/87	---	19.1	43.8	37.8	WHISKEY CREEK	6800	3/25/87	42	13.1	23.2	21.8
WET CREEK SUMMIT	7680	3/31/87	24	6.4	11.4	12.8	WHITE ELEPHANT	7710	3/31/87	51	16.0	31.3	26.6
PILLOW, BLACKFOOT, UPPER SNAKE AND PORTNEUF BASINS							WILDOHORSE DIVIDE	6490	3/27/87	32	11.0	15.9	17.9
AFTON RANGER STATION	6240	3/30/87	0	.0	.0	1.7	WILDOHORSE DVO PILLOW	6490	4/01/87	---	9.9	16.5	.0
ALLEN RANCH	6470	3/30/87	18	7.2	13.4	10.4	WILLOW CREEK	8450	3/30/87	59	21.0	---	31.2
ARIZONA	6820	4/01/87	---	10.8E	21.2	20.2	WILLOW CRK PILLOW	8450	4/01/87	---	14.8	40.5	27.8
ASPEN GROVE	6500	4/01/87	---	7.8E	10.9	12.6	WOOD CANYON DIVIDE	7450	3/30/87	34	9.9	25.1	19.8
ASTER CREEK	7750	3/31/87	49	15.9	41.5	31.1	SOUTHSIDE SNAKE BASIN						
AUSTIN BROTHERS RNCH	6400	3/30/87	14	4.6	11.4	8.8	ANTELOPE RIDGE	6180	3/26/87	0	.0	.0	6.3
BASE CAMP	7030	3/30/87	41	13.0	26.5	20.7	BADGER GULCH	6660	3/25/87	25	8.8	16.1	13.5
BASE CAMP PILLOW	7030	4/01/87	---	11.6	21.3	18.9	BATTLE CREEK	5720	3/25/87	0	.0	---	.0
BEAVERDALE CREEK	6120	3/26/87	10	2.7	8.0	9.7	BEAR CREEK	7800	3/31/87	53	17.2	22.7	22.2
BIG SPRINGS	6400	3/31/87	33	12.4	19.0	21.4	BEAR CK SNOTEL	7800	4/01/87	---	14.3	22.4	33.9
BIRCH CREEK	6800	3/30/87	19	6.8	6.9	11.4	BIG BEND	6700	3/30/87	13	4.0	9.5	9.0
BLACK BEAR	7950	3/25/87	70	20.2	49.4	43.2	BOSTETTER R.S.	7500	3/25/87	40	12.2	29.4	20.6
BLACK CANYON	7960	3/30/87	59	20.2	35.7	---	BOSTETTER RS PILLOW	7500	4/01/87	---	10.1	19.5	18.7
BLACK MOOSE	8160	3/30/87	64	22.4	42.0	40.1	BOY SCOUT CAMP	7740	3/25/87	36	11.0	19.2	17.0
BLACK ROCK	8900	4/01/87	---	18.9E	26.5	22.4	BULL BASIN	5460	3/25/87	0	.0	---	.6
BLIND BULL SUMM	8650	3/30/87	58	18.0	35.6	27.3	CEAR CREEK	6820	3/31/87	19	6.6	6.2	10.5
BLIND BULL PILLOW	8650	4/01/87	---	15.0	44.6	26.0	CLEAR CREEK MEADOWS	9420	3/24/87	60	17.4	23.4	24.1
BLUE LEDGE MINE	6900	3/28/87	37	10.6	15.9	17.5	DEADLINE	7400	3/31/87	33	12.6	12.8	22.9
BLUE RIDGE	6780	3/30/87	31	12.6	20.9	19.6	DEADLINE SOUTH	7450	3/31/87	53	20.9	31.1	25.1
BONE	6200	3/30/87	9	2.9	.0	6.8	FOX CREEK	6800	3/31/87	25	8.3	6.9	10.5
BROCKMAN STATION	6430	3/30/87	19	7.5	8.0	9.2	GEORGE CREEK	8840	3/25/87	11	3.8	5.4	6.9
BRYAN FLAT	6420	3/30/87	25	6.9	10.6	9.2	GOAT CREEK	6700	3/30/87	54	16.2	26.6	---
CAMP CREEK	6580	3/27/87	18	6.2	7.2	11.6	GOLD CREEK	6600	3/30/87	37	14.3	19.6	19.2
CCC CAMP	7000	3/30/87	26	8.4	16.6	12.9	HOWELL CANYON	7980	3/25/87	55	.9	1.8	5.3
CDOTONWOOD LAKE	7600	3/30/87	36	10.8	16.3	18.0	HOWELL CANYON PILLOW	7980	4/01/87	---	12.9	35.6	22.7
CDOTONWOOD CR PILLOW	7600	4/01/87	---	14.7	---	---	HUMMINGBIRD SPRINGS	8950	3/31/87	60	18.6	28.5	24.7
COULTER CREEK	7020	3/26/87	36	11.0	25.5	22.7	HYDE PASTURE	5760	3/25/87	---	.1T	---	3.5</

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
SOUTH MOUNTAIN	6500	3/26/87	20	7.5	18.6	14.7
SOUTH MTN PILLOW	6500	4/1/87	---	12.2	22.1	14.5
SUBLETT	5950	3/25/87	18	5.8	12.0	11.3
SUCCOR CREEK	6100	3/25/87	27	10.3	--	6.8
TAYLOR CANYON	6200	3/30/87	0	.0	.0	3.7
VAUGHT RANCH	5830	3/25/87	0	.0	--	1.7
VIPONT	7670	3/25/87	34	9.8	20.0	16.5
WAR EAGLE	7280	3/25/87	36	10.8	--	23.3
WILSON CREEK	7500	3/31/87	28	10.2	10.5	13.4
GREAT BASIN			WATERSHED VII			
BURT'S-MILLER RANCH	7900	3/25/87	18	5.1	3.6	6.0
CHRISTENSEN RANCH	5560	4/01/87	---	.0E	5.6	8.1
CLIFF CANYON	7200	3/24/87	8	1.8	3.4	10.5
CUB RIVER R.S.	5450	3/24/87	11	3.7	--	7.3
DANIELS CREEK	6270	3/24/87	9	2.2	.7	5.2
DRY BASIN	7820	3/24/87	53	15.6	36.1	30.6
DRY BREAD POND	8350	3/24/87	31	7.7	24.9	19.5
DRY CREEK FLAT	6360	3/24/87	0	.0	.9	5.8
EMIGRANT SUMMIT	7390	3/30/87	40	12.1	37.3	25.9
EMIGRANT SUM PILLOW	7390	4/01/87	---	13.3	--	30.0
EMIGRATION CANYON	6500	3/30/87	19	6.2	12.8	11.1
FRANKLIN BASIN	8020	3/24/87	53	15.4	34.8	28.3
FRANKLIN BSN PILLOW	8040	4/01/87	---	17.4	41.3	31.8
GARDEN CITY SUMMIT	7600	3/24/87	33	7.9	24.9	18.3
GIVEOUT	6860	4/01/87	28	7.7	21.0	13.2
GIVEOUT PILLOW	6840	4/01/87	---	4.9	16.3	14.4
GIVEOUT NEW	6930	4/01/87	18	5.8	17.4	11.7
HAYDEN FORK	9400	3/25/87	46	11.2	19.5	16.0
HORSESHOE BASIN	8000	4/01/87	---	14.3E	31.5	28.5
KELLEY RANGER STA.	8180	3/30/87	45	12.0	28.6	18.5
KELLEY R.S. PILLOW	8180	4/01/87	---	9.3	30.0	16.4
LIBERTY SPRING	8600	3/24/87	69	21.0	57.7	40.2
LITTLE BEAVER	6790	4/01/87	30	8.6	23.5	16.2
LOWER ELKHORN	6960	3/24/87	17	5.1	15.3	14.0
LOWER HOME CANYON	7640	3/31/87	26	7.8	22.0	14.7
MONTE CRISTO R.S.	8960	3/24/87	47	13.9	32.0	25.8
MONTPELIER CREEK	6540	4/01/87	---	3.5E	9.7	8.2
OXFORD MOUNTAIN	6800	3/24/87	9	2.7	8.4	9.6
OXFORD SPRING	6740	3/24/87	8	2.5	11.9	10.7
OXFORD SPRING PILLOW	6740	4/01/87	---	1.7	11.4	12.6
SLUG CREEK DIVIDE	7230	3/31/87	26	8.8	22.9	17.6
SLUG CK DVD PILLOW	7230	4/01/87	---	9.1	24.3	20.0
STILLWATER CAMP	8550	3/26/87	35	7.7	12.3	11.0
STRAWBERRY CREEK	5820	3/30/87	0	.0	6.3	10.7
STRAWBERRY-MINK DVD	6720	3/24/87	31	9.5	28.2	22.4
UPPER ELKHORN	7140	3/24/87	35	8.8	25.8	19.7
UPPER HOME CANYON	8560	3/31/87	51	15.2	37.9	25.1
WILLOW FLAT	6070	3/24/87	23	6.9	--	15.5
WOOD CANYON DIVIDE	7450	3/30/87	34	9.9	25.1	19.8
WORM CREEK	6620	3/24/87	31	10.3	17.9	20.2

OTHER INFORMATION

FARMERS AND RANCHERS FACE WATER SHORTAGE THIS YEAR

Snow surveys taken near April 1 indicate that below to well below normal flows will occur on many streams across central and southern Idaho. Study this Water Supply Outlook Report carefully for streamflow and reservoir storage figures that concern your area.

Keep in touch with your irrigation district, reservoir manager, or others who monitor and regulate water supplies for estimates of the supply available to you. You may find you'll need to change crops, reduce planted acres, adjust tillage operations, or manage your livestock differently to conserve a short water supply.

Here are some water conservation tips to help make the best use of limited water supplies:

FARMERS

The type of crops you plant may need to be adjusted. Find out whether you will have a little water all season, or more in the spring and none later on. Vary crops accordingly. For example, alfalfa, corn and sugar beets need water all season. Wheat and barley need water early in the season.

Don't plant too early. Be sure the soil is warm enough for rapid and complete seed germination.

Consider using chemicals rather than tillage to control water-using weeds.

If you decide to plant fewer acres, plant drought tolerant cover crops on unplanted fields to protect from wind erosion.

IRRIGATORS

Know your soil type. This is your guide to rate and frequency of irrigation. Know precisely how fast your soil can accept water and its total water-holding capacity. This will help you decide how much water to apply at a given time.

If you have a conservation plan for your farm, or if the soil in your area has been mapped, the Soil Conservation Service can cross-check soil type and irrigation data and provide you with the water-holding capacity of your soil for a given crop.

Check your irrigation system carefully. Make certain ditches are cleared of water-wasting weeds or debris that slow delivery. Check sprinkler heads and nozzles for wear and leaks, pipes for tight connections, and valves for leaks.

Consider ditch lining or gated pipe. This will reduce the 10-90 percent loss which occurs in earth ditches.

DRYLAND FARMERS

Valley precipitation totals are below normal across central and southern Idaho: Soil moisture levels are below normal and good spring precip will be needed to bring moisture up to normal.

A conservation tillage system is your best protection. Leaving residues from the previous crop on the soil surface will retard runoff, increase absorption and percolation, and reduce evaporation.

Keep necessary tillage shallow. Delay spring tillage until absolutely essential to help conserve soil moisture.

Don't use turn plows or one-way discs. Use sweeps for the first necessary operation. Over-tillage will destroy residues and dry out the soil.

Use chemicals for weed control whenever possible.

RANCHERS

Consider adjusting livestock numbers to balance with the forage supply. Cull herds more than normal; sell calves and lambs early.

Determine forage needs and plan to buy needed supplements early.

Grow small grain for use as hay or pasture; it requires less water than conventional forage. Defer planting pasture, hay or range forage until a more favorable water year.

Check with the Soil Conservation Service and your local soil conservation district for details concerning your soil and water conservation problems. The next water supply forecast will be issued about May 1, 1987.

The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State

Idaho Department of Water Resources
Soil and Water Conservation Districts of Idaho

Federal

U.S. Department of Agriculture
Forest Service
U.S. Department of Army
Corps of Engineers
U.S. Department of Commerce
NOAA, National Weather Service
U.S. Department of Interior
Bureau of Reclamation
Geological Survey, Water Resources Division
Shoshone-Bannock Tribal Council

Local

Big Lost River Irrigation District
Big Wood Irrigation Company
Boise Project Board of Control
Idaho Water District #01
Lewiston Orchards Irrigation District
Little Wood River Irrigation District
North Board of Control — Owyhee Project
Salmon Falls Irrigation Company
South Board of Control — Owyhee Project

Private

Cyprus Mining Company
FMC Corporation
Idaho Power Company
Le Bois Resort
Washington Water Power Company

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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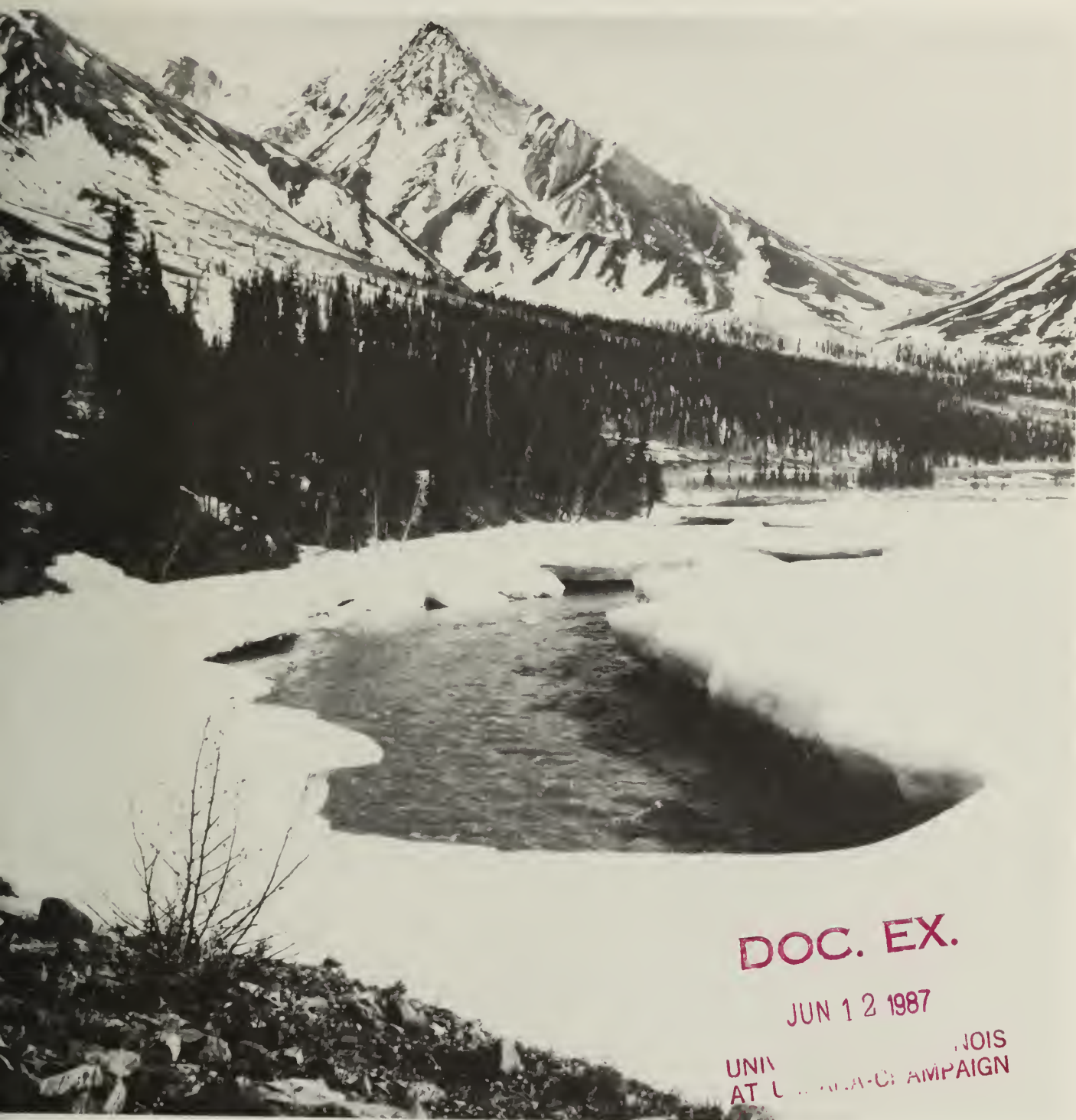
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Service

Boise,
Idaho



Idaho Water Supply Outlook

May 1, 1987



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Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are termed reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. Because of the limited space, snow survey measurements are not published in monthly reports. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola, Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Denver, CO 80211
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 97102
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97208
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 547, Portland, OR 97209.

Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Idaho Water Supply Outlook

and

Federal — State — Private Cooperative Snow Surveys

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Boise, Idaho

THE HISTORY OF THE
CITY OF BOSTON

FROM THE FIRST SETTLEMENT
TO THE PRESENT TIME
BY
JOSEPH NEALE

VOLUME I.

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JOSEPH NEALE, 1782.

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THE HISTORY OF THE

REIGN OF

CHARLES THE FIRST

BY

JOHN BURNET

OF THE UNIVERSITY OF OXFORD

IN TWO VOLUMES

LONDON

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Sign of the Sun, in Strand

1679

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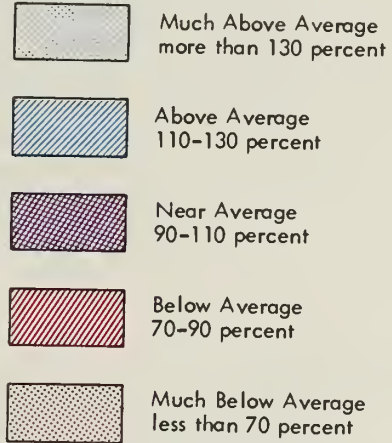
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STREAMFLOW PROSPECTS IDAHO

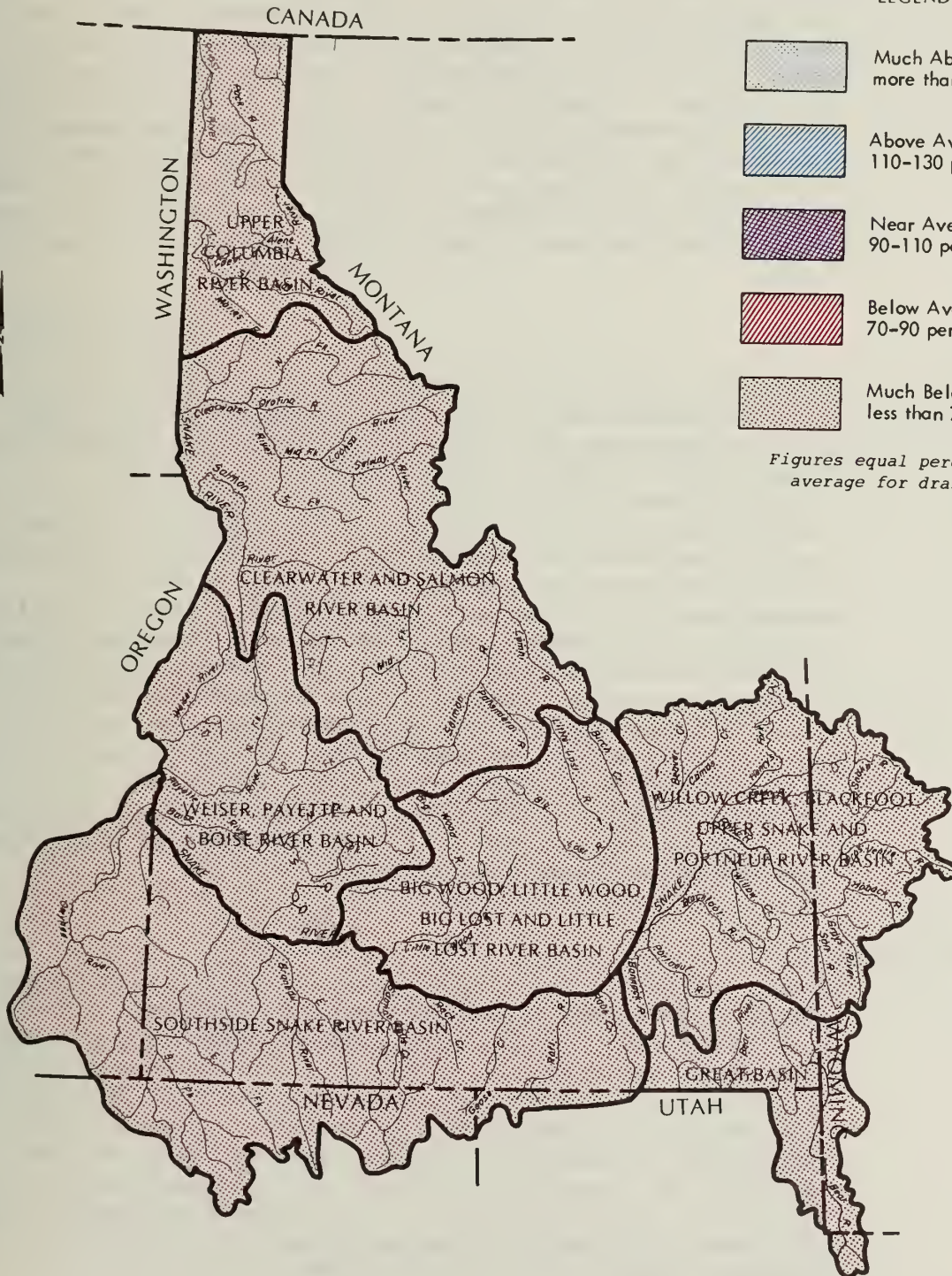
0 25 50 75 100 MI

0 50 100 150 KM

LEGEND



Figures equal percent of
average for drainage.



GENERAL OUTLOOK

SUMMARY:

Snow surveys taken near May 1 indicate that record or near record low flows will occur on many streams across central and southern Idaho this spring and summer. Much above average temperatures and below normal precipitation during April has depleted much of the snowpack across southern Idaho. Many basins show little or no measurable snowpack left on May 1. Nearly all streams from the Clearwater drainage south reached their peak snowmelt flows by the end of April and are expected to recede rapidly as the remaining snowpack is depleted. May-Sept volume streamflow forecasts are near or at record low levels for most southern Idaho streams. Water will be in very short supply for the remainder of the season over much of Idaho.

SNOWPACK:

Idaho's snowpack conditions deteriorated significantly during April from the already low conditions reported a month ago. April brought below normal precipitation and much above average temperatures to the state, resulting in a continuation of the snowmelt that began in March. Lower elevation snowpacks and most middle elevation snowpacks are now depleted. Higher elevation snowpacks, which normally accumulate through late April or early May, began to melt in mid-April and are now well into the melt phase. Most snowpacks across southern Idaho will be completely melted by mid-May. Current snowpack conditions generally range from 39 to 69% of normal in the northern part of the state, from the Clearwater drainage north. In the southern part of the state, snowpacks generally range from 10-30% of normal, with most low elevation basins reporting no measurable snow.

PRECIPITATION:

April was another extremely dry month across most of Idaho, with many stations reporting near record low precipitation amounts and record high temperatures. The state averaged only 45% of normal precipitation for the month, with the southern half of the state reporting only about 21% of normal. Ketchum and Salmon were among the lowest reporting stations at 4% and 13% of normal precipitation, respectively. In contrast, precipitation in the Idaho panhandle area was near to slightly above normal for the month, with Kellogg reporting 115% of normal.

RESERVOIRS:

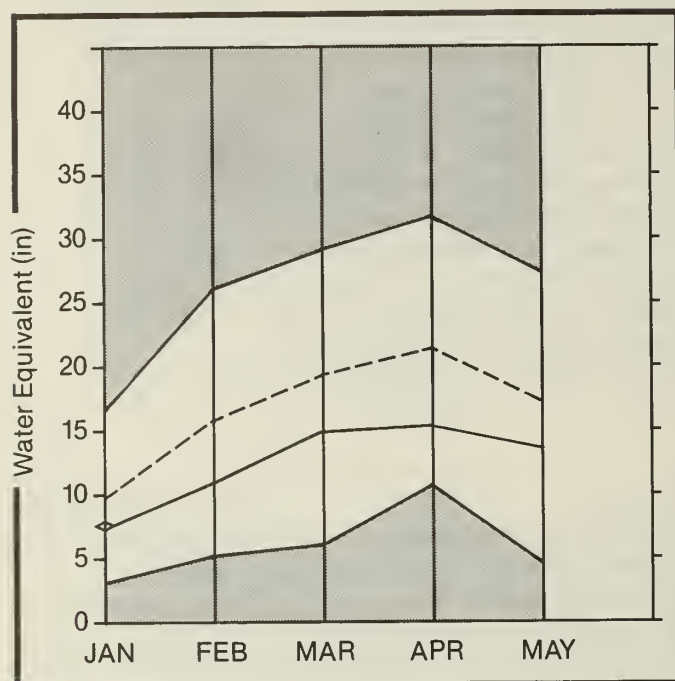
The low snowpack conditions prompted most reservoir operators to begin storing water early and reservoir storage across the state is generally above normal for May 1. Current reservoir storage ranges from a low of 60% of average in Lake Pend Oreille to 184% of normal in Brownlee Reservoir, with 23 key reservoirs across the state reporting a combined storage of 117% of normal. Most major reservoirs on the main stem of the Snake in eastern Idaho are nearly full or expected to fill soon. Some reservoirs on the smaller tributaries to the Snake (including Willow Creek and Blackfoot Reservoirs) are not expected to fill. In the central and southern part of the state, several major reservoir systems and many of the smaller local and private reservoirs will not fill. Among those not expected to fill are Crane Creek, Arrowrock, Magic, Carey Valley, and Owyhee Reservoirs. Most northern Idaho reservoirs are expected to fill.

STREAMFLOW:

Streamflows for the May-Sept period are forecast to be near or at record low levels over the southern half of the state. Forecasts in southern Idaho range from a low of 17% of normal for the Inflow to Magic Reservoir to 56% on the Henry's Fork near Ashton. Record low flows are predicted on the Little Wood, Big Lost, Little Lost, Henry's Fork, Teton, and Portneuf drainages. Streamflows in northern Idaho will be somewhat better, but are expected to be well below normal, ranging from 44% to 59%. Most streams across extreme southern Idaho reached their peak flows for the season in early March. Elsewhere, most streams reached peak flow conditions the last week of April. Streams are expected to recede rapidly as the last of the snowpack is depleted. Streamflows will be very low by mid to late June across much of Idaho and smaller streams could dry up by the middle or end of the summer. Users without the benefit of reservoir storage can expect water shortages early this summer. All water users are advised to stay in contact with their local irrigation district, reservoir managers or others who monitor and regulate water supplies for estimates of the water supply in their area.

Upper Columbia Basin

Mountain snowpack* (inches)



*Based on selected stations

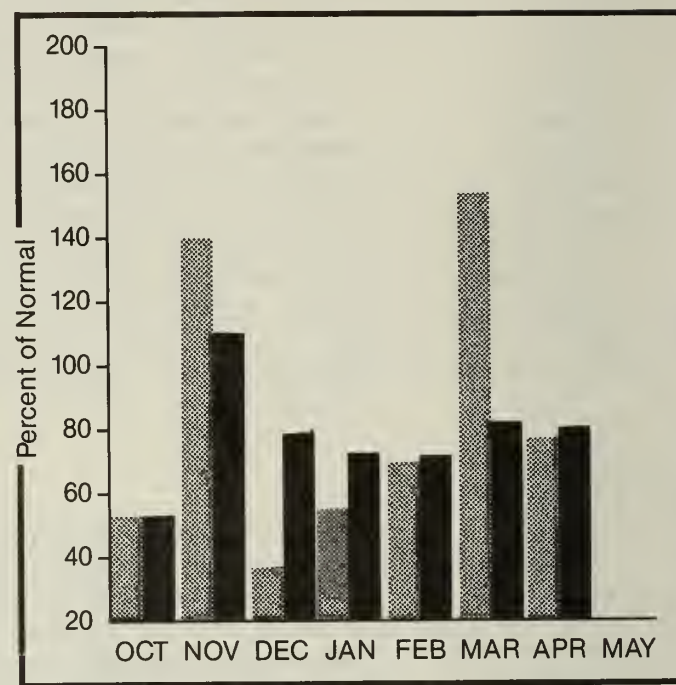
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

Above average temperatures in April along with much earlier than normal snowmelt has significantly reduced the snowpack in the Upper Columbia watershed. The overall snowpack is 53% of normal as of May 1 - down from the 74% figure reported on April 1. Individual basin snowpacks range from 19% of normal on the Coeur d'Alene drainage to 58% on the Kootenai. April precipitation in the basin was 78% of average for valley stations, with higher elevation SNOTEL sites reporting 95%. May-July streamflow forecasts range from 48% on the St. Joe at Calder to 59% on the Priest River. Many streams in northern Idaho have already peaked due to the well above normal temperatures during the last week of April.

For more information contact your local Soil Conservation Service office.

UPPER COLUMBIA RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
KOOTENAI at Leonia 2	MAY-SEP	7687.0	5850.0	76	7160.0	93	4470.0	58
	MAY-JUL	6586.0	4950.0	75	6070.0	92	3760.0	57
CLARK FORK at White Horse Rapids 2	MAY-SEP	11760.0	7180.0	61	9180.0	78	5180.0	44
	MAY-JUL	10540.0	6350.0	60	8140.0	77	4560.0	43
PEND OREILLE LAKE inflow 2	MAY-SEP	12960.0	7580.0	58	9650.0	74	5380.0	42
	MAY-JUL	11680.0	6750.0	58	8620.0	74	4760.0	41
PRIEST RIVER at Priest 2	MAY-SEP	715.0	420.0	59	585.0	82	260.0	36
SPOKANE at Post Falls 2	MAY-SEP	1957.0	1010.0	52	1480.0	76	520.0	27
	MAY-JUL	1859.0	950.0	51	1400.0	75	485.0	26
ST. JOE at Calder	MAY-SEP	1008.0	500.0	50	690.0	68	310.0	31
	MAY-JUL	938.0	450.0	48	625.0	67	270.0	29
COEUR D' ALENE at Enaville	MAY-SEP	543.0	280.0	52	430.0	79	130.0	24
	MAY-JUL	503.0	255.0	51	395.0	79	114.0	23

RESERVOIR STORAGE

(1000AF)

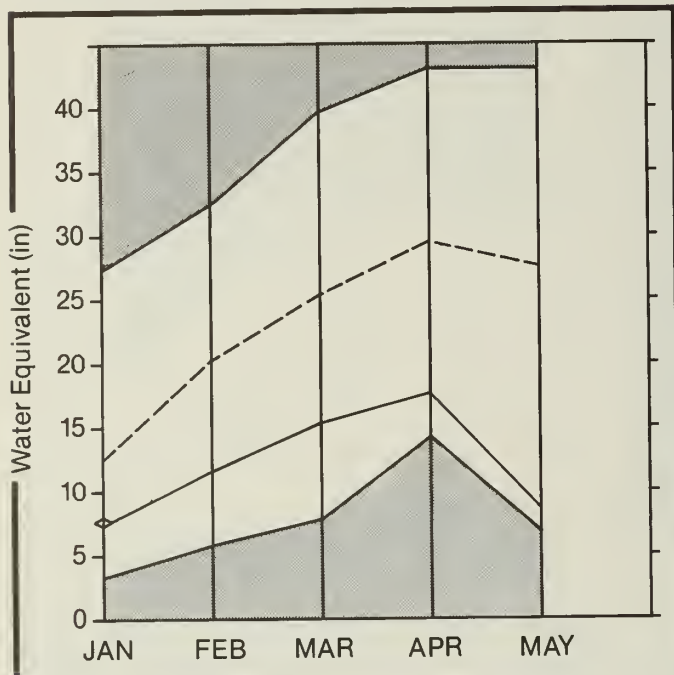
WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE THIS YEAR	** LAST YEAR	** AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	% OF AVERAGE
HUNGRY HORSE	3451.0	2665.0	2729.0	2040.0	Kootenai ab Bonners Ferry	56	86	58
FLATHEAD LAKE	1791.0	944.8	944.8	929.0	Pend Oreille River	156	58	41
PEND OREILLE	1561.2	555.0	961.2	920.7	Clark Fork River	108	47	33
NOXON RAPIDS	335.0	329.1	328.5	186.3	Priest River	6	139	69
COEUR D'ALENE	291.2	281.2	289.3	317.2	Rathdrum Creek	2	68	33
FRIEST LAKE	97.7	99.8	53.8	74.4	Havden Lake	0	0	0
					Coeur d'Alene River	6	52	19
					St. Joe River	7	75	49
					Spokane River	13	70	39
					Palouse River	0	0	0

- 1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
 2 - Corrected for upstream diversions or changes in reservoir storage.
 The average is computed for the 1961-85 base period.

Clearwater and Salmon River Basin

Mountain snowpack* (inches)



*Based on selected stations

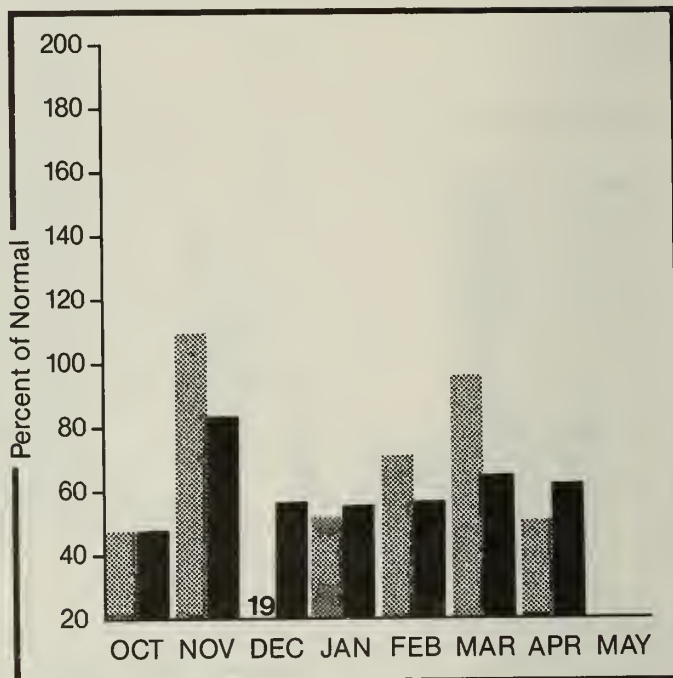
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

May 1 snow measurements show a significant decrease in the mountain snowpack since April 1. The watershed snowpack average is currently 35% of normal, as compared to 63% a month ago. Individual basin snowpack averages range from 45% on the N. Fork Clearwater to 21% on the Lemhi and Salmon basins. Valley precipitation was only 52% of normal across the basin, with high elevation SNOTEL sites reporting 74% of normal precipitation for April. Streamflow forecasts for the May-July period range from 44% of normal for Inflow to Dworshak Reservoir to 50% on the Clearwater at Orofino. Much earlier than normal snowmelt caused most streams to peak near the first of May. With the depletion of the remaining snowpack during early May, streams will recede much earlier than normal this year.

For more information contact your local Soil Conservation Service office.

CLEARWATER AND SALMON RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
CLEARWATER at Orofino	MAY-SEP	4318.0	2160.0	50	3150.0	73	1120.0	26
CLEARWATER at Spalding	MAY-SEP	6787.0	3120.0	46	4480.0	66	1760.0	26
	MAY-JUL	6325.0	2880.0	46	4140.0	65	1620.0	26
DWORSHAK RESERVOIR inflow	MAY-SEP	2366.0	1040.0	44	1460.0	62	615.0	26
	MAY-JUL	2179.0	950.0	44	1340.0	61	555.0	25
SALMON at Salmon	MAY-SEP	984.0	495.0	50	800.0	81	180.0	18
SALMON at Whitebird	MAY-SEP	6363.0	2900.0	46	3980.0	63	1750.0	28
	MAY-JUL	5678.0	2540.0	45	3500.0	62	1520.0	27

RESERVOIR STORAGE					(1000AF)	WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF		
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE	
DWORSHAK	3467.8	3324.8	2648.8	2276.0	North Fork Clearwater	14	66	45	
					Lochsa River	5	58	41	
					Selway River	6	53	40	
					Clearwater River	21	62	43	
					Salmon River ab Salmon	5	24	27	
					Lemhi River	2	19	21	
					Salmon River Total	19	25	21	

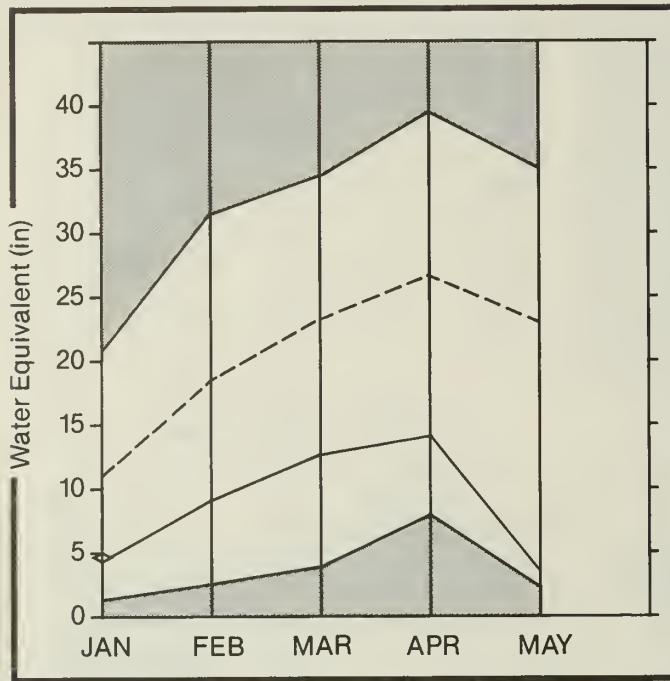
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

Weiser, Payette, and Boise River Basin

Mountain snowpack* (inches)



*Based on selected stations

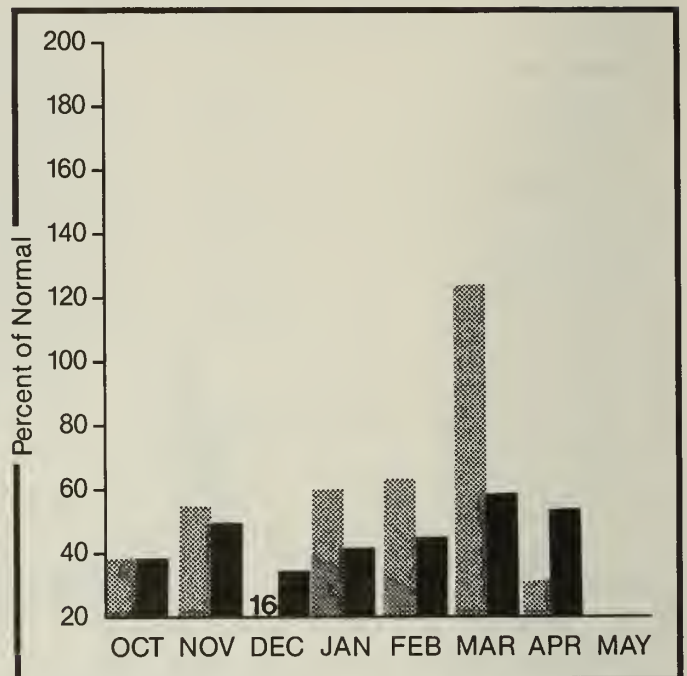
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

Above average temperatures and early snowmelt has reduced the half-normal snowpack measured on April 1 to only 21% of normal on May 1. Individual basin snowpack averages range from 16% on the Weiser drainage to 29% on the S. Fork Boise River. April precipitation was once again well below normal. Valley stations across the basin reported only 54% of normal rainfall, while automated SNOTEL mountain stations reported 64% of normal. Streamflow forecasts range from 26% of normal for the Boise at Boise to 37% on the N. Fk. Payette at Cascade. Much earlier than normal snowmelt caused many streams to peak on or before May 1. Reservoir storage in the 3 basins is currently 118% of average and 70% of capacity. Several reservoirs, including the Boise system and Crane Creek Reservoir, are not expected to fill this year, and irrigation water shortages can be expected. Irrigators without stored water should expect streams to recede to low baseflow conditions much earlier than normal this year.

WEISER, PAYETTE AND BOISE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
WEISER at Weiser	MAY-JUL	272.0	109.0	40	205.0	75	30.0	11
PAYETTE nr Horseshoe 2	MAY-SEP	1551.0	465.0	30	730.0	47	200.0	13
	MAY-JUL	1406.0	425.0	30	665.0	47	185.0	13
NF PAYETTE at Cascade 2	MAY-SEP	479.0	177.0	37	265.0	55	90.0	19
	MAY-JUL	441.0	163.0	37	245.0	56	84.0	19
NF PAYETTE nr Banks 2	MAY-SEP	601.0	220.0	37	335.0	56	105.0	17
	MAY-JUL	557.0	205.0	37	310.0	56	99.0	18
SF PAYETTE at Lowman	MAY-SEP	463.0	139.0	30	220.0	48	56.0	12
	MAY-JUL	404.0	121.0	30	194.0	48	48.0	12
DEADWOOD RESERVOIR inflow	MAY-JUL	129.0	41.0	32	63.0	49	19.0	15
BOISE RIVER nr Twin Springs	MAY-SEP	602.0	170.0	28	265.0	44	74.0	12
	MAY-JUL	544.0	152.0	28	240.0	44	65.0	12
SF BOISE AT Anderson Dam 1	MAY-SEP	507.0	135.0	27	225.0	44	44.0	9
SF BOISE at Anderson Dam 1	MAY-JUL	466.0	125.0	27	210.0	45	41.0	9
BOISE RIVER nr Boise 1	MAY-SEP	1295.0	335.0	26	555.0	43	140.0	11
	MAY-JUL	1175.0	310.0	26	510.0	43	135.0	11

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

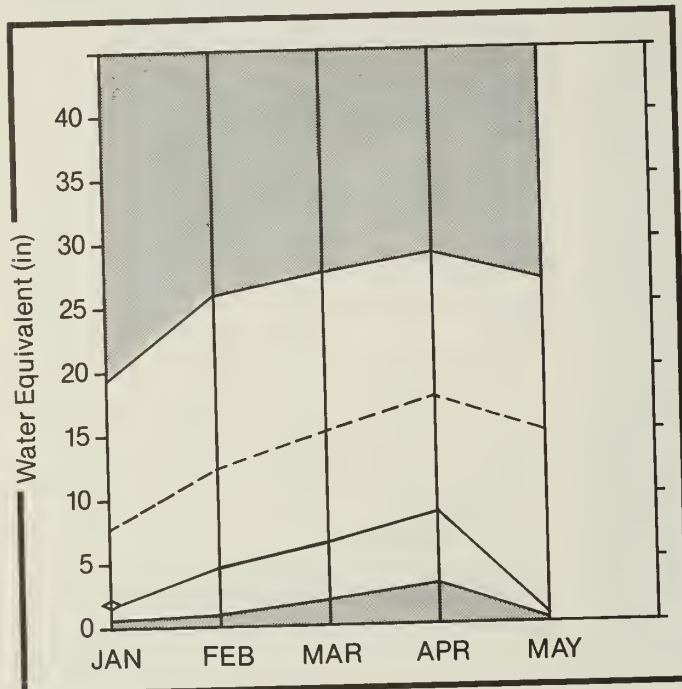
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
MANN CREEK	11.3	11.3	11.3	10.4	Mann Creek	0	0	0
CASCADE	703.2	561.2	497.5	411.7	Weiser River	3	30	16
DEADWOOD	162.0	117.8	108.2	101.1	North Fork Payette	9	28	19
ANDERSON RANCH	464.2	416.4	394.3	327.2	South Fork Payette	7	25	22
ARROWROCK	286.6	130.8	220.6	214.9	Payette River Total	15	26	20
LUCKY PEAK	307.0	294.0	216.5	182.9	Middle & North Fork Boise	9	24	27
LAKE LOWELL (DEER FLAT)	177.0	140.1	167.2	169.8	South Fork Boise River	6	25	29
					Boise River Total	15	22	23
					Canyon Creek	0	0	0

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

Big Wood, Little Wood, Big Lost, and Little Lost River Basin

Mountain snowpack* (inches)



*Based on selected stations

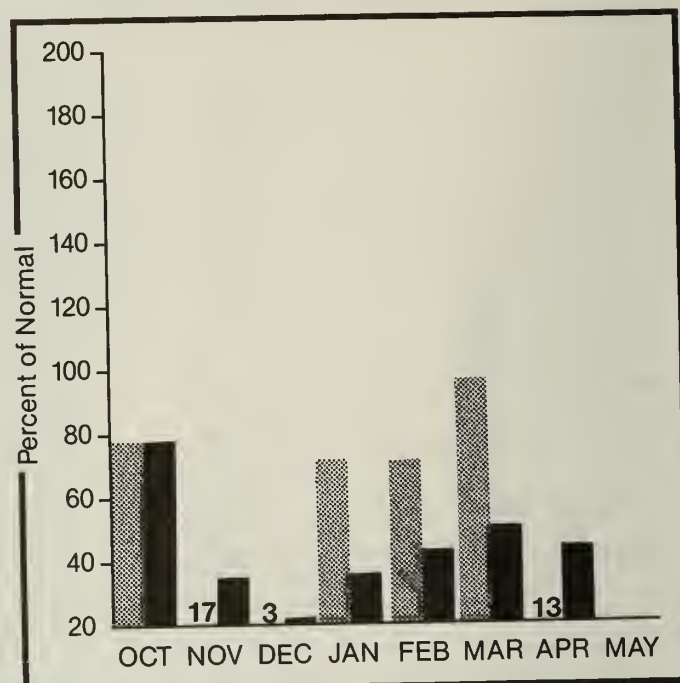
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

Well below normal precipitation was reported during April over the entire basin. Most higher elevation SNOTEL stations reported 30 to 45% of normal precipitation, while Ketchum received only 4% of average rainfall. Above normal temperatures continued the early snowmelt which began in March. Only the higher elevation snow courses in the Big Wood River drainage and in the headwater areas of the Big Lost River have measurable amounts of snow left. The remaining snowpack is expected to be depleted by May 15. Basin snowpacks currently range from 0% of normal on the Camas Creek drainage to only 16% in the Big Wood. Streamflows have reached their snowmelt peak and are expected to begin receding rapidly as the last of the snowpack is depleted. May-July streamflows are currently forecast to be near record low conditions, ranging from 17% to 39% of normal. Water users without storage facilities could face water shortages by early June.

BIG WOOD, LITTLE WOOD, BIG LOST AND LITTLE LOST RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BIG WOOD nr Bellevue	MAY-SEP	190.0	38.0	20	87.0	46	17.0	9
	MAY-JUL	175.0	35.0	20	81.0	46	18.0	10
MAGIC RESERVOIR inflow	MAY-SEP	237.0	40.0	17	116.0	49	20.0	8
	MAY-JUL	221.0	38.0	17	109.0	49	15.0	7
LITTLE WOOD nr Carey	MAY-SEP	79.0	15.0	19	35.0	44	5.0	6
	MAY-JUL	71.0	13.5	19	31.0	44	4.0	6
BIG LOST at Howell Ranch	MAY-SEP	208.0	73.0	35	127.0	61	40.0	19
	MAY-JUL	181.0	63.0	35	110.0	61	36.0	20
BIG LOST nr Mackay 2	MAY-SEP	182.0	60.0	33	118.0	65	18.0	10
	MAY-JUL	148.0	49.0	33	96.0	65	15.0	10
LITTLE LOST bl Wet Ck	MAY-SEP	35.2	13.7	39	24.0	68	4.0	11
	MAY-JUL	27.8	10.8	39	19.0	68	3.0	11
LITTLE LOST nr Howe	MAY-SEP	38.0	14.4	38	26.0	68	3.0	8
	MAY-JUL	28.0	10.6	38	19.0	68	2.0	7

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE	
MAGIC	191.5	147.9	186.4	167.7	Big Wood ab Magic	9	14	16
LITTLE WOOD	30.0	29.1	22.9	24.6	Camas Creek	2	0	0
CAREY VALLEY	14.4	7.2	13.9	---	Big Wood Total	10	14	16
MACKAY	44.4	40.6	38.2	34.2	Little Wood River	4	9	9
					Fish Creek	0	0	0
					Big Lost River	5	12	14
					Little Lost River	1	0	0

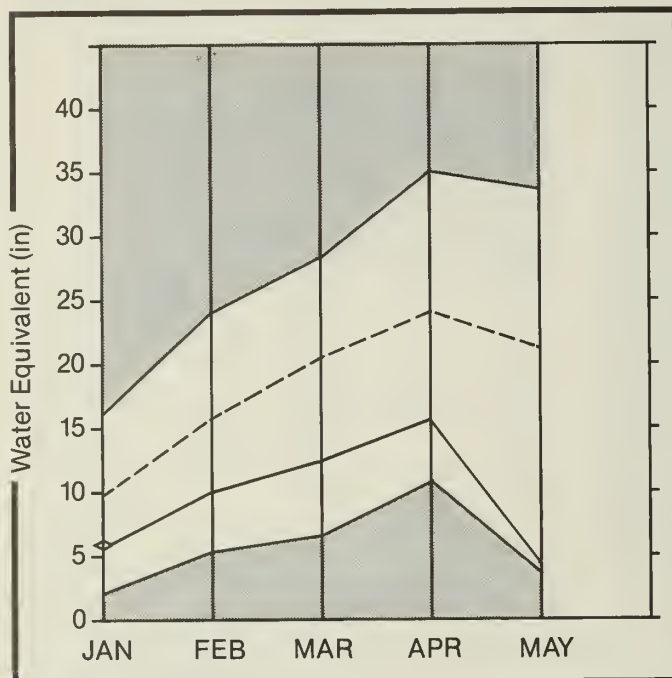
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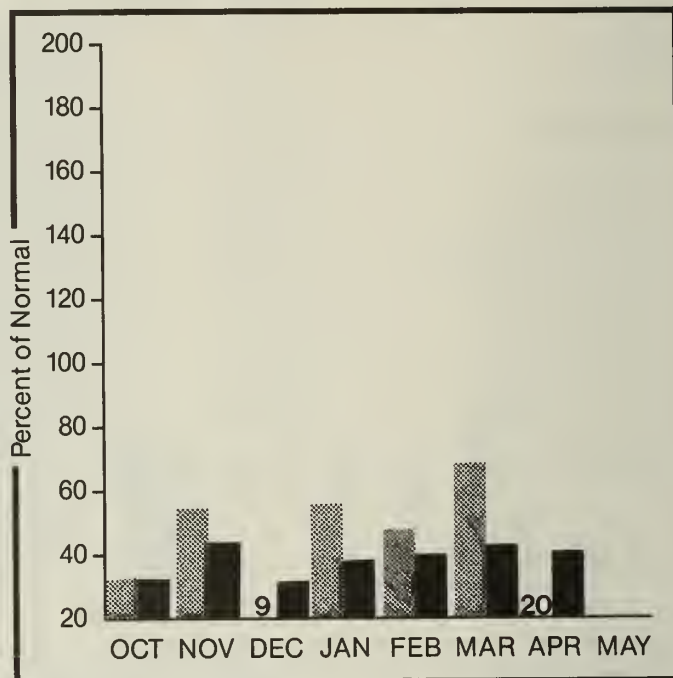
Willow Creek, Blackfoot, Upper Snake, and Portneuf River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum ———

Average - - - - -

Minimum ———

Current ◊ ———

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

Much above average temperatures and well below normal precipitation throughout the basin have depleted lower and middle elevation snowpacks, and significantly reduced higher elevation snow. No measurable snow remained at measuring stations in the Willow Creek, Blackfoot, and Portneuf River basins on May 1. Elsewhere, snowpacks generally ranged from 9% of normal on the Henry's Fork to 34% on the Snake River basin above Palisades Reservoir. The Gros Ventre River drainage in Wyoming reports 69% of normal snowpack. Most reservoirs on the main stem of the Snake and Henry's Fork are now full or expected to fill soon. Some reservoirs on the smaller tributaries, including Ririe and Blackfoot Reservoirs, are not expected to fill. Projected May-July streamflows are very low, ranging from 30% of normal for Inflow to Blackfoot Reservoir to 56% for the Henry's Fork near Ashton. Most of the streams reached peak flow conditions in late April and are expected to recede rapidly as the last of the snowpack is depleted.

WILLOW CREEK, BLACKFOOT, UPPER SNAKE AND PORTNEUF RIVER BASIN

STREAMFLOW FORECASTS

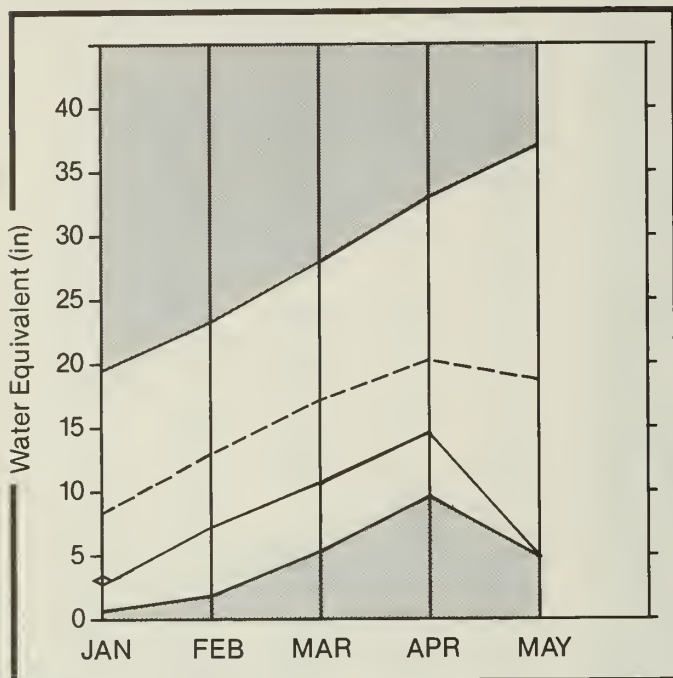
FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
HENRY'S FORK nr Ashton 2	MAY-SEP MAY-JUL	639.0 449.0	360.0 250.0	56 56	410.0 285.0	64 63	310.0 215.0	49 48
HENRYS FORK nr Rexburg 2	MAY-SEP MAY-JUL	1389.0 1055.0	725.0 550.0	52 52	945.0 720.0	68 68	515.0 390.0	37 37
FALLS RIVER nr Squirrel	APR-JUL	373.0	210.0	56	270.0	72	155.0	42
TETON RIVER ab S Leigh Ck	MAY-SEP MAY-JUL	172.0 123.2	82.0 59.0	48 48	120.0 86.0	70 70	44.0 32.0	26 26
TETON nr St. Anthony	MAY-SEP MAY-JUL	434.0 342.0	230.0 182.0	53 53	275.0 220.0	63 64	180.0 145.0	41 42
SNAKE AT Moran 1	APR-SEP	888.0	530.0	60	625.0	70	430.0	48
PALISADES LAKE inflow 1	APR-SEP	3852.0	1990.0	52	2680.0	70	1290.0	33
SNAKE nr Heise 2	MAY-SEP MAY-JUL	3790.0 3173.0	1720.0 1460.0	45 46	2400.0 2030.0	63 64	1040.0 890.0	27 28
SNAKE nr Blackfoot 2	MAY-SEP MAY-JUL	5243.0 4152.0	2620.0 2090.0	50 50	3400.0 2710.0	65 65	1890.0 1510.0	36 36
BLACKFOOT RESERVOIR INFLOW (SUM)	MAY-SEP	125.0	38.0	30	75.0	60	30.0	24
PORTNEUF at Topaz	MAY-SEP MAY-JUL	78.0 57.0	31.0 23.0	40 40	54.0 40.0	69 70	8.0 6.0	10 11

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
ISLAND PARK	127.6	135.4	108.0	125.7	Camas-Beaver Creeks	0	0 0
GRASSY LAKE	15.2	14.4	13.5	11.5	Henrys Fork River	8	9 9
JACKSON LAKE	624.4	201.7	119.6	494.3	Teton River	7	20 24
PALISADES	1357.0	1350.9	797.4	871.8	SNAKE above Palisades	16	27 34
AMERICAN FALLS	1700.0	1601.8	1423.7	1542.9	SNAKE above Jackson Lake	2	16 18
BROWNLEE	975.3	948.5	574.2	515.9	Gros Ventre River	2	50 67
BLACKFOOT		NO REPORT			Greys River	2	34 42
HENRY'S LAKE	90.4	87.0	---	81.8	Salt River	4	0 0
RIRIE	96.5	69.8	---	63.5	Willow Creek	6	0 0
					Blackfoot River	3	0 0
					Portneuf River	0	0 0
					Toponce Creek	0	0 0

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
 2 - Corrected for upstream diversions or changes in reservoir storage.
 The average is computed for the 1961-85 base period.

Southside Snake River Basin

Mountain snowpack* (inches)

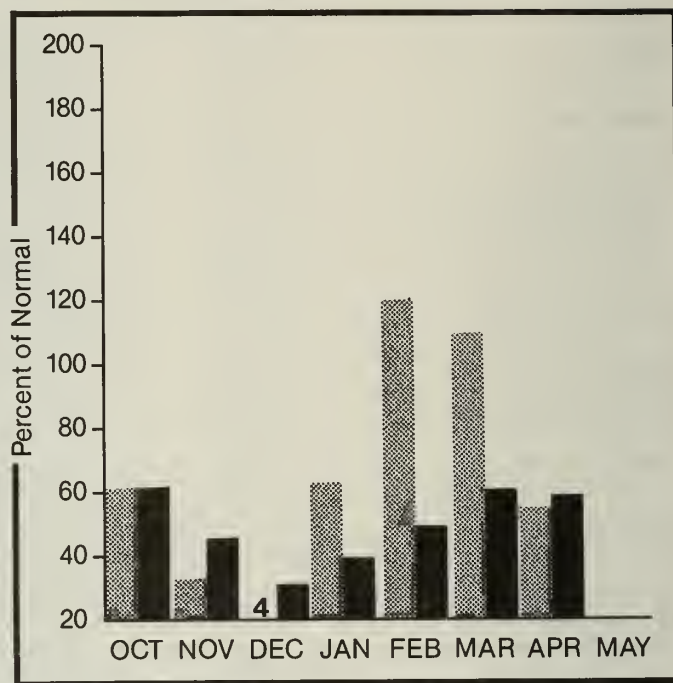


*Based on selected stations

Maximum Minimum

Average Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

April precipitation was much below normal throughout the basin with most higher elevation stations reporting only 25 to 45% of normal rainfall. Well above normal temperature conditions continued to deplete the snowpack which began melting in early March. Snowpack below 7000 feet is completely melted and only patchy snow remained between the 7000 and 8000 foot level on May 1. Currently, basin-wide snowpacks range from 12 to 33% of normal. The remaining snowpack is expected to be depleted by May 15. Most streamflows peaked in early March and streams are expected to recede rapidly as the last of the snow melts. May-July streamflows are forecast to be near record low conditions, ranging from 25% for Inflow to Lake Owyhee to 37% for Inflow to Oakley Reservoir.

For more information contact your local Soil Conservation Service office.

SOUTHSIDE SNAKE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
OAKLEY RESERVOIR inflow	MAY-SEP	25.0	9.2	37	17.0	68	4.0	16
	MAY-JUL	22.0	8.1	37	15.0	68	4.0	18
SALMON FALLS CK nr San Jacinto	MAY-SEP	67.0	23.0	34	47.0	70	6.0	9
	MAY-JUL	62.0	22.0	35	44.0	71	5.0	8
BRUNEAU nr Hot Springs	MAY-SEP	188.0	56.0	30	126.0	67	18.0	10
	MAY-JUL	176.0	53.0	30	118.0	67	18.0	10
OWYHEE RIVER nr Gold Creek 2	APR-JUL	27.8	8.0	29	23.0	83	3.0	11
OWYHEE RIVER nr Owyhee 2	APR-JUL	86.0	36.0	42	63.0	73	9.0	10
OWYHEE LAKE inflow 1	MAY-SEP	260.0	65.0	25	169.0	65	30.0	12
	MAY-JUL	232.0	60.0	26	153.0	66	23.0	10
OWYHEE at Rome 2	MAY-JUL	189.0	47.0	25	132.0	70	19.0	10

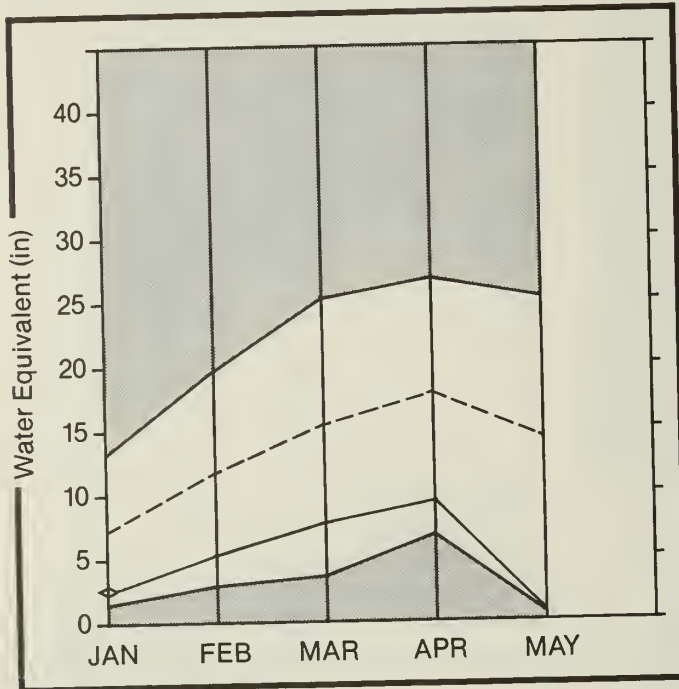
RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
OAKLEY	77.4	34.6	52.6	39.2	Raft River	1	19 31
SALMON FALLS	182.6	101.8	133.5	81.4	Goose-Trapper Creeks	1	23 31
OWYHEE	715.0	523.2	713.9	606.9	Salmon Falls Creek	8	25 17
					Bruneau River	4	38 33
					Owyhee River	5	17 12

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

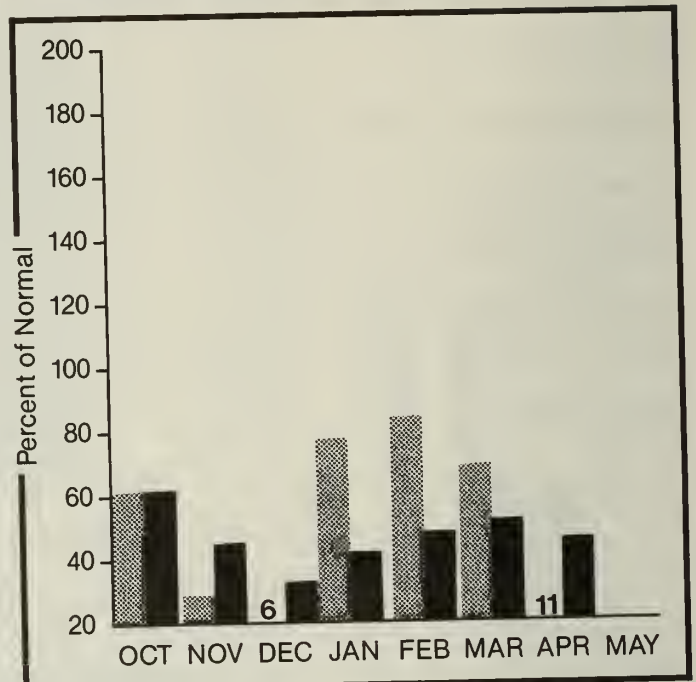
Great Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum ———
Minimum ———

Average - - - - -
Current ◊ ———

Monthly precipitation [hatched bar]

Year to date precipitation [solid black bar]

WATER SUPPLY OUTLOOK:

April brought the 7th consecutive month of below normal precipitation over the basin. Mountain SNOTEL precipitation stations reported 40 to 70% of normal rainfall, while valley station received only 10 to 20% of normal amounts. Much above average temperatures prompted early snowmelt and snowpacks below 7500 feet are now depleted. Basin-wide snowpack conditions generally range from 0 to 10% of normal on the smaller tributaries to the Bear River in Idaho. The Upper Bear River basin in Utah reports 36% of average snowpack. Streams reached their snowmelt peak flows during April and are expected to recede rapidly as the remaining snowpack is depleted. May-July streamflows are forecast to be very low, ranging from 19 to 34% of normal. Water users without storage facilities could face water shortages early this summer as the streams recede to low baseflow conditions.

For more information contact your local Soil Conservation Service office.

GREAT BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BEAR at Harer	APR-SEP	337.0	93.0	28	154.0	46	32.0	9
MONTPELIER CK nr Montpelier	MAY-SEP	11.3	2.2	19	6.0	53	1.0	9
CUB RIVER nr Preston	MAY-SEP	51.0	18.6	36	37.0	73	1.0	2
	MAY-JUL	46.0	15.8	34	32.0	70	1.0	2

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AUG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
BEAR LAKE	1421.0	1118.9	1123.8	1059.0	Bear River (above Harer)	11	25 36
MONTPELIER CREEK	3.9	3.3	1.3	2.3	Montpelier Creek	6	6 10
					Mink Creek	2	1 2
					Cub River	1	25 43
					Malad River	0	0 0

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

SNOW DATA MEASUREMENTS

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
UPPER COLUMBIA BASIN							WATERSHED I						
ABOVE BURKE	4100	4/30/87	8	2.8	8.0	18.6	SAOOLE MTN PILLOW	7900	5/01/87	---	8.8	25.3	29.1
BEAR MOUNTAIN	5400	5/04/87	84	43.4	32.0	63.2	SAVAGE PASS	6170	4/30/87	23	11.4	20.6	27.9
BEAR MTN PILLOW	5400	5/01/87	---	49.2	35.8	64.5	SAVAGE PASS PILLOW	6170	5/01/87	---	9.1	23.0	29.6
BENTON MEADOW	2370	4/29/87	0	.0	.0	.0	SECECH SUMMIT	6520	4/29/87	13	6.2	28.1	34.5
BENTON SPRING	4920	4/29/87	4	1.6	2.8	15.4	SECECH SUMMIT PILLOW	6520	5/01/87	---	6.0	29.5	34.9
BOYER MOUNTAIN	5250	4/28/87	28	13.6	17.1	24.8	SHANGHAI SUMMIT	4570	4/30/87	0	.0	9.4	21.1
BREEZY SAOOLE	5010	4/29/87	17	8.1	10.0	26.8	SHANGHAI SUM PILLOW	4570	5/01/87	---	.0	8.6	22.4
BUNCHGRASS MEADOWS	5000	4/28/87	43	18.8	15.6	29.2	SHERWIN	3200	4/29/87	0	.0	.0	4.6
BUNCHGRASS MOWPILLOW	5000	5/01/87	---	18.8	---	26.4	SHERWIN PILLOW	3200	5/01/87	---	.0	.0	6.8
COPPER RIDGE	4820	4/30/87	0	.0	.0	22.2	SLAG-A-MELT LAKE	8750	4/25/87	32	11.1	28.8	29.0
EAST RAGGED SAOOLE	3740	5/01/87	0	.0	3.0	16.6	SQUAW MEADOW	5900	4/29/87	14	7.2	24.6	34.8
FORTY-NINE MEADOWS	4830	4/29/87	9	4.2	8.8	25.1	TWIN LAKES	6510	4/30/87	48	23.8	33.8	45.2
FOURTH OF JULY SUM	3200	5/01/87	0	.0	---	.4	TWIN LAKES PILLOW	6400	5/01/87	---	22.3	31.0	42.6
GRANITE PEAK	6000	4/29/87	55	24.9	29.3	46.1	VIENNA MINE	8960	4/29/87	35	15.4	51.3	39.1
HUMBOLDT GULCH	4250	4/30/87	0	.0	4.3	13.0	VIENNA MINE PILLOW	8960	5/01/87	---	12.8	46.0	40.3
HUMBOLDT GLCH PILLOW	4250	5/01/87	---	.0	1.4	10.1	WEST BRANCH	5560	4/28/87	0	.0	11.0	18.6
LOOKOUT	5140	4/30/87	28	13.6	21.6	32.7	WEST BRANCH PILLOW	5560	5/01/87	---	.0	9.3	20.2
LOOKOUT PILLOW	5140	5/01/87	---	11.3	22.8	31.3							
LOST LAKE	6110	4/29/87	77	35.5	42.9	60.1							
LOST LAKE PILLOW	6110	5/01/87	---	41.6	14.8	66.8							
LOWER SANOS CREEK	3120	4/30/87	7	2.8	6.0	16.3							
MOSQUITO RIDGE	5200	5/01/87	---	18.2E	---	36.6							
MOSQUITO PILLOW	5200	5/01/87	---	17.5	20.5	37.0							
RAGGED RIDGE	3330	5/01/87	0	.0	---	---							
SAGE CREEK SAOOLE	4080	4/30/87	0	.0	---	---							
SCHWEITZER BASIN	6090	4/29/87	76	38.8	32.0	51.1							
SCHWEITZER BN PILLOW	6090	5/01/87	---	40.3	35.2	53.3							
SCHWEITZER BOWL	4800	5/01/87	---	13.5E	.0	24.2							
SCHWEITZER RIDGE	6200	4/29/87	80	43.0	32.1	48.8							
SHERWIN	3200	4/29/87	0	.0	.0	4.6							
SHERWIN PILLOW	3200	5/01/87	---	.0	.0	6.8							
SKITWISH RIDGE	5110	4/30/87	13	6.4	9.8	28.8							
SMITH CREEK	4800	4/28/87	63	30.4	24.6	45.3							
SUNSET	5540	5/01/87	---	18.0E	---	32.8							
SUNSET PILLOW	5540	5/01/87	---	19.7	26.0	35.1							
TWIN SPIRIT DIVIOE	3480	5/01/87	0	.0	.0	---							
CLEARWATER AND SALMON BASINS							WATERSHED II						
BANNER SUMMIT	7040	4/29/87	20	7.9	29.9	30.0	ATLANTA SUMMIT	7600	4/29/87	26	10.3	40.2	35.6
BANNER SUMMIT PILLOW	7040	5/01/87	---	5.9	26.8	28.2	ATLANTA SUM PILLOW	7580	5/01/87	---	8.3	39.2	33.1
BEAR BASIN	5350	4/29/87	0	.0	11.2	17.6	ATLANTA TOWNSITE	5370	4/29/87	0	.0	.0	---
BEAR BASIN PILLOW	5350	5/01/87	---	.0	10.8	19.0	BANNER SUMMIT	7040	4/29/87	20	7.9	29.9	30.0
BIG CREEK SUMMIT	6580	4/30/87	20	9.4	38.8	37.6	BANNER SUMMIT PILLOW	7040	5/01/87	---	5.9	26.8	28.2
BIG CREEK SUM PILLOW	6580	5/01/87	---	10.9	40.8	33.9	BAO BEAR	4940	5/01/87	0	.0	0	5.0
BOULDER CREEK	5440	4/28/87	0	.0	1.8	14.6	BEAR BASIN	5350	4/29/87	0	.0	11.2	17.6
BREEZY SAOOLE	5010	4/29/87	17	8.1	10.0	26.9	BEAR BASIN PILLOW	5350	5/01/87	---	.0E	---	25.6
BRUND CREEK	7920	5/01/87	0	.0	---	16.3	BEAR SAOOLE	6180	5/01/87	---	.0	10.2	24.6
BUCK MEADOWS	5650	4/30/87	23	10.4	23.5	27.1	BEAR SAOOLE PILLOW	6180	5/01/87	---	.0E	---	11.2
CAYUSE AIRSTRIP	3500	4/30/87	0	.0	.0	.7	BENNETT MOUNTAIN	6560	5/01/87	---	.0	---	14.0
COOL CREEK	6250	4/30/87	71	30.1	41.5	53.2	BENNETT MTN PILLOW	6560	5/01/87	---	.0	---	14.0
COOL CREEK PILLOW	6280	5/01/87	---	32.1	43.5	52.0	BIG CREEK SUMMIT	6580	4/30/87	20	9.4	38.8	37.6
COOLWATER MOUNTAIN	6030	4/30/87	42	18.5	32.3	35.8	BIG CREEK SUM PILLOW	6580	5/01/87	---	10.9	40.8	33.9
CRATER MEADOWS	5960	4/30/87	43	24.4	33.8	47.0	BOGUS BASIN	6240	4/29/87	0	.0	20.7	22.5
CRATER MOWS PILLOW	5960	5/01/87	---	18.3	34.1	49.9	BOGUS BASIN ROAD	5540	4/29/87	0	.0	.0	.3
CROOKED FORK	3610	4/30/87	0	.0	.0	2.6	BOULDER CREEK	5440	4/28/87	0	.0	1.8	14.6
DEADWOOD SUMMIT	6860	4/29/87	35	15.9	45.9	45.9	BRUNOAGE RESV PILLOW	4500	5/01/87	---	2.2	---	---
DEADWOOD SUM PILLOW	6860	5/01/87	---	15.3	47.1	55.9	COUCH SUMMIT	6840	5/03/87	0	.0	10.9	14.2
ELK BUTTE	5550	4/29/87	6	2.8	17.3	31.5	COZY COVE	5380	4/29/87	0	.0	.0	8.7
ELK BUTTE PILLOW	5550	5/01/87	---	12.9	25.5	38.7	COZY COVE PILLOW	5380	5/01/87	---	.0	.0	11.5
FISH LAKE AIRSTRIP	5650	4/30/87	41	19.8	28.2	40.2	CRAWFORD R.S.	4860	4/30/87	0	.0	.0	.2
FORTY-NINE MEADOWS	4830	4/29/87	9	4.2	8.8	25.1	DEADMAN GULCH	5600	4/30/87	5	2.2	5.1	10.6
GALENA SUMMIT	8780	5/02/87	16	4.4	27.4	25.8	DEADWOOD AIRSTRIP	5360	4/29/87	0	.0	.0	7.1
GALENA SUMMIT PILLOW	8780	5/01/87	---	4.7	24.9	21.2	DEADWOOD SUMMIT	6860	4/29/87	35	15.9	45.9	45.9
G1880NS PASS	7100	4/28/87	15	5.8	18.9	23.9	DEADWOOD SUM PILLOW	6860	5/01/87	---	15.3	47.1	55.9
GOAT LAKE	6500	4/30/87	61	28.7	42.2	50.9	DOLLARHIDE SUMMIT	8420	4/29/87	20	7.1	30.8	25.0
GRANITE PEAK	6000	4/29/87	55	24.9	29.3	46.1	DOLLARHIDE SM PILLOW	8420	5/01/87	---	8.3	35.2	29.5
HEMLOCK BUTTE	5810	4/30/87	34	16.8	34.1	50.7	GRAHAM GUARO STATION	5690	4/29/87	0	.0	.0	6.9
HEMLOCK BUTTE PILLOW	5810	5/01/87	---	19.4	38.3	53.0	GRAHAM G.S. PILLOW	5690	5/01/87	---	.0	.0	.0
HOOOON BASIN	6050	5/01/87	63	31.1	45.9	53.2	IOAHM CITY TOWNSITE	4000	4/30/87	0	.0	.0	31.4
HOOOON BASIN PILLOW	6050	5/01/87	---	29.0	40.1	49.6	JACKSON PEAK	7070	4/29/87	22	8.7	35.6	32.2
HOOOON CREEK	5900	5/01/87	54	27.2	36.8	49.3	JACKSON PEAK PILLOW	7070	5/01/87	---	.0	7.1	12.7
LEHMI PASS	7480	4/26/87	3	.8	7.5	7.2	LAKE FORK	5290	4/29/87	0	.0	.0	37.2
LEHMI RIDGE	8100	4/26/87	10	2.8	11.8	10.0	MOORES CREEK SUMMIT	6100	4/30/87	9	3.8	37.2	31.7
LEHMI RIDGE PILLOW	8100	5/01/87	---	.8	13.0	10.5	MOORES CK SUM PILLOW	6100	5/01/87	---	4.4	43.5	34.3
LOLO PASS	5240	4/30/87	11	5.4	14.0	28.3							
LOLO PASS PILLOW	5240	5/01/87	---	4.3	16.9	29.5							
LOST HORSE	5940	4/30/87	31	14.6	25.5	33.9							
LOST LAKE	6110	4/29/87	77	35.5	42.9	60.1							
LOST LAKE PILLOW	6110	5/01/87	---	41.6	14.8	66.8							
MEADOW LAKE	9150	5/01/87	---	5.0E	---	20.9							
MEADOW LAKE PILLOW	9150	5/01/87	---	4.7	---	21.2							
MILL CREEK SUMMIT	8800	4/29/87	23	8.0	25.9	24.4							
MOONSHINE PILLOW	7440	5/01/87	---	.0	8.5	10.6							
MOOSE CREEK	6200	4/30/87	0	.0	11.4	14.4							
MOOSE CR PILLOW	6200	5/01/87	---	.0	---	14.4							
MORGAN CREEK	7600	4/29/87	0	.0	12.5	12.5							
MORGAN CREEK PILLOW	7600	5/01/87	---	.0	9.1	11.6							
MOUNTAIN MEADOWS	6360	4/30/87	5	1.7	15.7	23.5							
MOUNTAIN MOWS PILLOW	6360	5/01/87	---	8.1	21.5	27.4							

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	
IG WOOD, LITTLE WOOD, BIG LOST AND LITTLE LOST BASINS														WATERSHED IV
BEAR CANYON	7900	4/29/87	9	3.3	21.6	17.9	PHILLIPS BENCH PILL.	8200	5/01/87	---	8.4	37.8	30.2	
BEAR CANYON PILLW	7900	5/01/87	---	4.1	24.6	17.2	PINE CREEK PASS	6810	4/29/87	0	.0	9.4	12.7	
BENNETT MOUNTAIN	6560	5/01/87	---	.0E	--	11.2	POISON MEADOWS	8500	4/26/87	36	14.3	42.6	30.8	
BENNETT MTN PILLW	6560	5/01/87	---	.0	--	14.0	PUTNAM	7220	4/28/87	0	.0	12.0	--	
COPPER BASIN	7640	4/29/87	0	.0	7.7	7.5	SALT RIVER SUMMIT	7700	4/29/87	0	.0	20.2	13.9	
COUCH SUMMIT	6840	5/03/87	0	.0	10.9	14.2	SALT RIVER PILLW	7700	5/01/87	---	0	19.6	13.9	
DOLLARHIDE SUMMIT	8420	4/29/87	20	7.1	30.8	25.0	SEGEWICK PEAK	7850	4/28/87	1	.3	27.2	--	
DOLLARHIDE SM PILLW	8420	5/01/87	---	8.3	35.2	25.5	SHEEP MOUNTAIN	6570	5/01/87	0	.0	8	9.5	
FISHPOLE LAKE	9300	4/29/87	16	6.9	36.1	23.6	SHEEP MTN PILLW	6570	5/01/87	---	0	3.9	10.3	
GALENA	7440	5/01/87	---	.0E	17.6	14.5	SLUG CREEK OVIDE	7230	4/28/87	0	.0	19.3	13.5	
GALENA PILLW	7440	5/01/87	---	1.6	20.1	20.1	SLUG CK OVO PILLW	7230	5/01/87	---	0	23.6	16.4	
GALENA NEW	7470	5/02/87	5	1.0	21.9	20.7	SNOW KING MTN	7660	4/27/87	0	.0	16.4	13.6	
GALENA SUMMIT	8780	5/02/87	16	4.4	27.4	25.8	SOMSEN RANCH	6840	4/24/87	0	.0	13.9	12.2	
GALENA SUMMIT PILLW	8780	5/01/87	---	4.7	24.9	21.2	SOMSEN RANCH PILLW	6800	5/01/87	---	0	9.1	9.8	
GARFIELD R.S.	6560	4/29/87	0	.0	.0	2.3	SPRING CRK. PILLW	9000	5/01/87	---	11.5	49.8	26.5	
GARFIELD R.S. PILLW	6560	5/01/87	---	.0	.0	5.5	STATE LINE	6660	4/29/87	0	.0	9.5	9.1	
GRAHAM RANCH	6270	5/02/87	0	.0	5.9	9.1	TETON PASS W.S.	7740	4/30/87	30	13.1	39.4	28.3	
HILTS CREEK	8000	5/01/87	---	.5	13.9	11.1	TEX CREEK	6650	5/01/87	0	.0E	.0	--	
HYNOMAN CREEK	7440	4/29/87	0	.0	10.6	10.7	TOGWATE PASS	9580	4/29/87	46	19.8	38.2	33.0	
HYNOMAN PILLW	7440	5/01/87	---	.0	11.0	11.1	TOGWATE PASS PILLW	9580	5/01/87	---	17.6	34.1	27.6	
LOST-WOOD OVIDE	7900	4/29/87	3	1.0	26.0	22.4	TOPONCE	6160	4/28/87	0	.0	.0	--	
LOST-WOOD OVO PILLW	7900	5/01/87	---	.0	29.5	26.3	TWITCHELL CANYON	6300	5/01/87	---	16.4	--	--	
MASCOT MINE	7780	4/29/87	0	.0	16.6	15.3	VALLEY VIEW	9160	5/01/87	---	0	5.4	12.8	
MOONSHINE	7440	5/01/87	---	.0	8.5	10.6	WHISKEY CREEK	6680	4/29/87	0	.0	18.4	18.7	
MULDOON	6320	4/29/87	0	.0	.0	.5	WHITE ELEPHANT	7710	5/01/87	---	.0E	30.9	25.3	
SOLOIDER R.S.	5740	5/03/87	0	.0	.0	1.4	WHITE ELEPHANT PILL	7710	5/01/87	---	2.6	36.6	27.2	
SOLDIER R.S. PILLW	4330	5/01/87	---	.0	.0	--	WILDMORSE OVIDE	6490	5/01/87	---	.0E	--	12.1	
STICKNEY MILL	7430	4/29/87	0	.0	3.6	6.0	WILDMORSE OVO PILLW	6490	5/01/87	---	.0	11.3	.0	
STICKNEY MILL PILLW	7430	5/01/87	---	.0	2.5	.0	WILLOW CREEK	8450	4/29/87	12	5.0	--	--	
SWEDE PEAK	7640	4/29/87	0	.0	15.4	15.6	WILLOW CRK PILLW	8450	5/01/87	---	6.1	42.5	28.1	
SWEDE PEAK PILLW	7640	5/01/87	---	.0	12.7	15.0								
VIENNA MINE	8960	4/29/87	35	15.4	51.3	39.1								
VIENNA MINE PILLW	8960	5/01/87	---	12.8	46.0	40.3								
WET CREEK SUMMIT	7680	4/30/87	0	.0	9.0	7.4								

SOUTHSIDE SNAKE BASIN

WATERSHEO VI

YELLOW, BLACKFOOT, UPPER SNAKE AND PORTNEUF BASINS

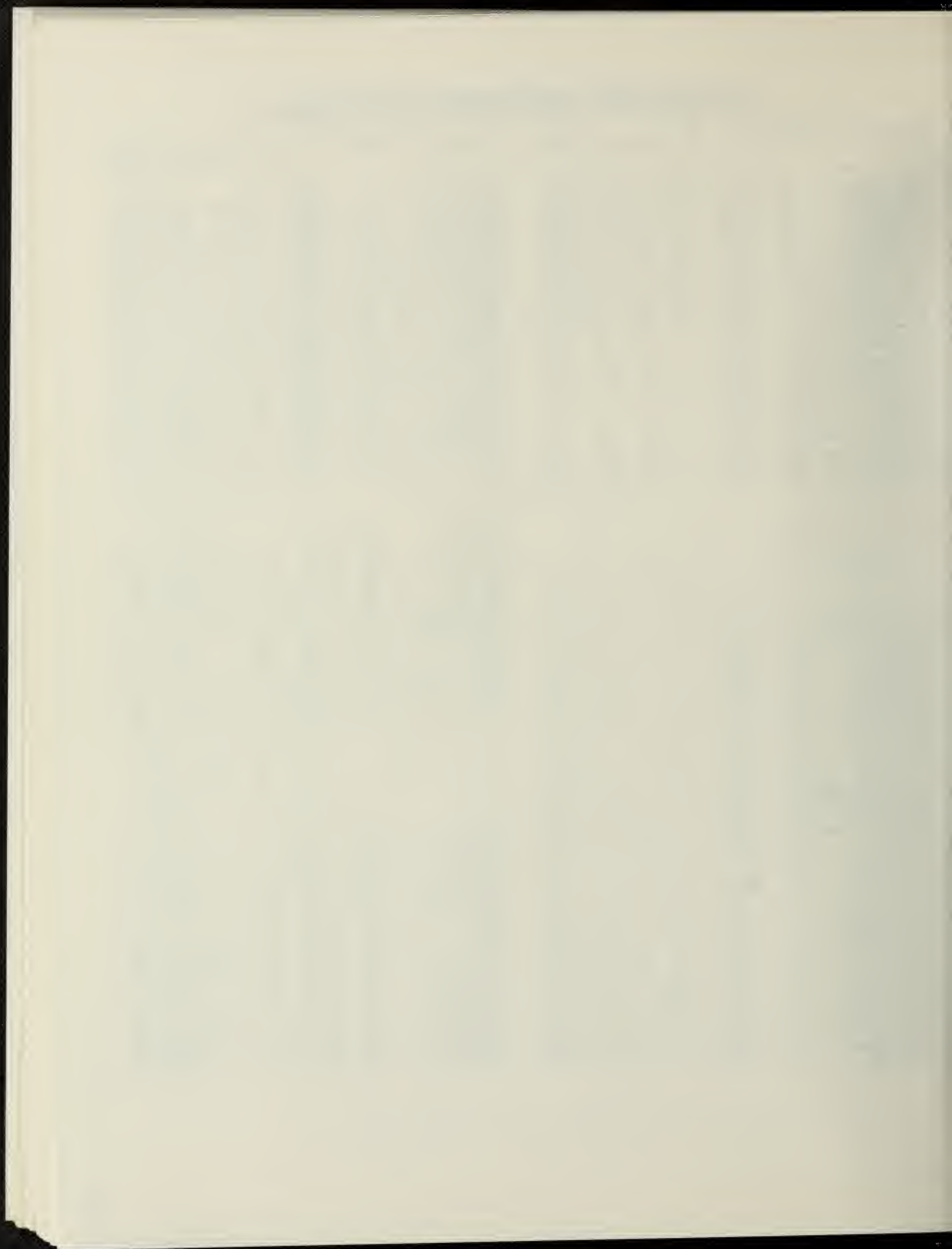
WATERSHEO V

ASPEN RANGER STATION	6240	4/29/87	0	.0	.0	.0
ASPEN GROVE	6500	5/01/87	0	.0	.0	---
BASE CAMP	7030	5/01/87	---	.0E	---	14.5
BASE CAMP PILLOW	7030	5/01/87	---	.0	17.1	13.2
BEAVERDAM CREEK	6120	4/28/87	0	.0	.0	---
BIG SPRINGS	6400	5/01/87	0	.0	11.1	16.2
BIRCH CREEK	6800	5/01/87	0	.0	.0	4.4
BLACK BEAR	7950	4/29/87	26	9.8	51.0	44.2
BLIND BULL SUMM	8650	4/26/87	40	15.0	---	29.2
BLIND BULL PILLOW	8650	5/01/87	---	9.9	---	28.1
BLUE LEDGE MINE	6900	5/01/87	---	.0E	---	---
BLUE RIDGE	6780	5/01/87	0	.0	8.3	17.4
BONE	6200	5/01/87	0	.0	.0	1.0
BROCKMAN STATION	6430	5/01/87	0	.0	.0	---
BRYAN FLAT	6420	4/26/87	0	.0	.0	2.7
CCC CAMP	7000	4/29/87	0	.0	12.6	8.9
COTTONWOOD LAKE	7600	4/26/87	0	.0	---	---
COTTONWOOD CR PILLOW	7600	5/01/87	---	1.8	---	---
COUTLER CREEK PILLOW	7020	5/01/87	---	.0	---	18.3
COLOR SPRINGS	7000	4/28/87	2	.7	20.4	---
CRAB CREEK	6860	5/01/87	---	.0E	---	15.7
CRAB CREEK	6860	5/01/87	---	.0	12.5	16.2
DARBY CANYON	8250	5/01/87	---	8.3E	---	23.2
EAST CREEK	7000	4/28/87	0	.0	13.6	---
EAST RIM DIVIDE	7930	4/29/87	5	1.9	13.9	11.1
EAST RIM PILLOW	7930	5/01/87	---	5.1	19.6	12.8
ELBO RANCH	7100	4/27/87	6	1.9	14.5	---
FALL CREEK	6820	5/01/87	0	.0	.0	---
GRASSY LAKE	7270	5/01/87	---	4.1E	37.6	34.9
GRASSY LAKE PILLOW	7270	5/01/87	---	4.1	39.2	36.4
GREYS BOUNDARY	5720	4/29/87	0	.0	.0	3.1
GRS VENTRE SUMMIT	8750	4/27/87	26	9.8	21.2	11.5
GRS VENTRE PILLOW	8750	5/01/87	---	.0	23.4	14.3
GROVER PARK DIVIDE	7000	4/29/87	0	.0	8.2	9.1
INDIAN MEADOWS	9420	5/01/87	---	.0E	50.0	38.1
ISLAND PARK	6290	5/01/87	0	.0	5.6	10.3
ISLAND PARK PILLOW	6290	5/01/87	---	.0	8.4	14.3
JACKPINE CREEK	7350	5/01/87	---	.0E	---	21.7
LAVA CREEK	7350	5/01/87	0	.0	10.7	12.1
LEWIS LAKE DIVIDE	7850	4/30/87	23	10.3	53.0	43.5
LEWIS LAKE PILLOW	7850	5/01/87	---	5.5	44.5	35.8
LOWER PE88LE	5780	4/28/87	0	.0	.0	---
MADISON PLATEAU	7750	4/29/87	7	2.5	26.5	23.2
MC RENOLDS RESERVOIR	6720	5/01/87	0	.0	8.4	16.3
MINK CREEK	6410	5/01/87	---	.0E	---	13.2
PACKSADOLE SPRING	8200	5/01/87	---	9.2E	39.5	29.0
PE88LE CREEK	6550	4/28/87	0	.0	3.1	---
PHILLIPS BENCH	8200	4/30/87	44	16.5	40.4	31.1

GREAT BASIN

WATERSHED VII

BURT'S-MILLER RANCH	7900	4/23/87	0	.0	.0	2.4
CUB RIVER R.S.	5450	4/23/87	0	.0	--	.4
ORY BREAD POND	8350	4/23/87	3	1.0	24.2	18.2
EMIGRANT SUMMIT	7390	4/29/87	1	.5	36.9	23.6
EMIGRANT SUM PILLOW	7390	5/01/87	--	.2	--	23.6
EMIGRATION CANYON	6500	4/29/87	0	.0	--	0.0
FRANKLIN BASIN	8020	4/23/87	26	8.9	36.1	20.7
FRANKLIN 85N PILLOW	8040	5/01/87	27	.0	40.9	28.0
GARDEN CITY SUMMIT	7600	4/23/87	12	4.2	23.5	15.2
GIVEOUT	6860	4/28/87	0	.0	13.7	7.1
GIVEOUT PILLOW	6840	5/01/87	---	.0	9.2	6.0
HAYOEN FOK	6930	5/01/87	---	0.0E	7.8	4.4
KELLEY RANGER STA.	9400	4/23/87	25	8.5	22.4	16.1
KELLEY R.S. PILLOW	8180	4/27/87	20	6.6	30.4	18.1
LITTLE BEAVER	8180	5/01/87	---	.0	27.9	15.6
LOWER HOME CANYON	6790	4/28/87	0	.0	16.3	9.9
MORTE CRISTO R.S.	7640	4/28/87	0	.0	16.3	11.5
MONTPELIER CREEK	8960	4/23/87	25	9.8	33.0	26.5
OXFORD SPRING	6540	4/28/87	0	.0	.0	0.0
OXFORD SPRING PILLOW	6740	5/01/87	---	.0	--	5.8
SLUG CREEK DIVIDE	6740	5/01/87	---	.0	2.4	6.7
SLUG CK OVO PILLOW	7230	4/28/87	0	.0	19.3	13.5
STILLWATER CAMP	7230	5/01/87	---	.0	23.6	16.4
STRAWBERRY CREEK	8550	4/23/87	8	2.1	10.0	8.4
UPPER HOME CANYON	5820	4/29/87	0	.0	.0	3.2
WILLOW FLAT	8560	4/28/87	21	6.7	40.5	23.8
	6070	4/23/87	0	.0	--	5.0



The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State

Idaho Department of Water Resources
Soil and Water Conservation Districts of Idaho

Federal

U.S. Department of Agriculture
Forest Service
U.S. Department of Army
Corps of Engineers
U.S. Department of Commerce
NOAA, National Weather Service
U.S. Department of Interior
Bureau of Reclamation
Geological Survey, Water Resources Division
Shoshone-Bannock Tribal Council

Local

Big Lost River Irrigation District
Big Wood Irrigation Company
Boise Project Board of Control
Idaho Water District #01
Lewiston Orchards Irrigation District
Little Wood River Irrigation District
North Board of Control — Owyhee Project
Salmon Falls Irrigation Company
South Board of Control — Owyhee Project

Private

Cyprus Mining Company
FMC Corporation
Idaho Power Company
Le Bois Resort
Washington Water Power Company

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

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SOIL CONSERVATION SERVICE

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Water Supply Outlook**

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Agriculture

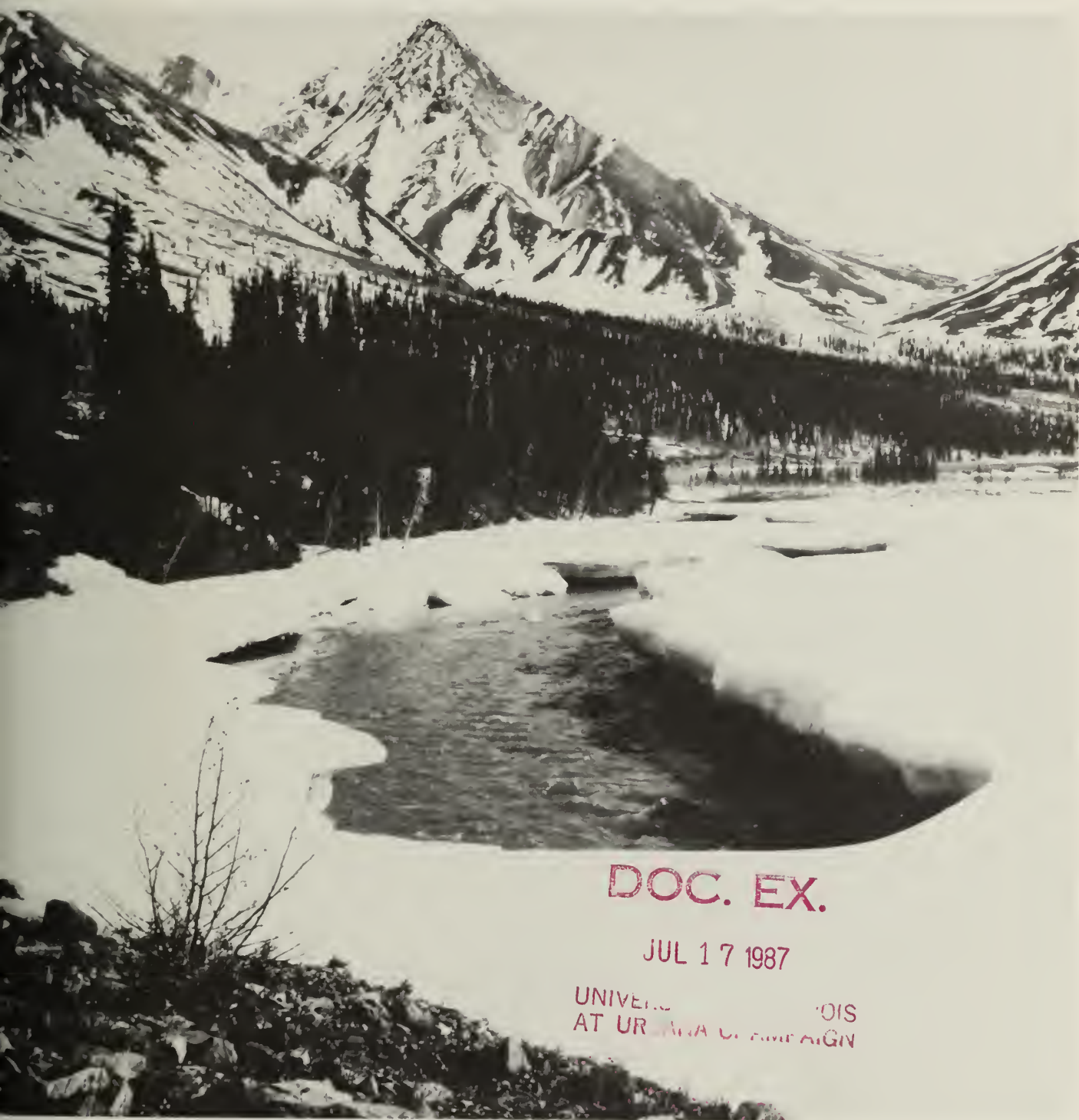
Soil
Conservation
Service

Boise,
Idaho



Idaho Water Supply Outlook

June 1, 1987



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Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are termed reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. Because of the limited space, snow survey measurements are not published in monthly reports. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola, Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Denver, CO 80211
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 97102
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97208
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 547, Portland, OR 97209.

Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Idaho Water Supply Outlook

and

Federal — State — Private Cooperative Snow Surveys

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Soil Conservation Service
Snow Surveys
304 N. 8th Street, Room 345
Boise, ID 83702

GENERAL OUTLOOK

SUMMARY:

ABOVE TO WELL ABOVE NORMAL PRECIPITATION THE LAST HALF OF MAY PROVIDED TEMPORARY RELIEF TO MUCH OF THE DROUGHT STRICKEN AREAS IN SOUTHERN IDAHO, BUT DID NOT SIGNIFICANTLY IMPROVE THE SUMMER WATER SUPPLY OUTLOOK AND IMPENDING WATER SHORTAGE SITUATION. SNOWPACKS ACROSS SOUTHERN IDAHO WERE NEARLY DEPLETED BY MID-MAY AND CURRENT STREAMFLOW CONDITIONS ARE WELL BELOW NORMAL. RESERVOIRS ARE NOW BEING DRAFTED TO MEET IRRIGATION DEMANDS AND MANY ARE EXPECTED TO BE VERY LOW OR EMPTY BY LATE SUMMER. WELL TIMED AND ABOVE AVERAGE PRECIPITATION WILL BE NEEDED FOR THE REMAINDER OF THE SEASON TO AVOID CRITICAL WATER SHORTAGES IN SOME AREAS OF CENTRAL AND SOUTHWESTERN IDAHO.

SNOWPACK:

Above average temperatures and well below normal precipitation the first half of May depleted most of the remaining snowpack across southern Idaho. Only three snow courses in southern Idaho reported any snowpack remaining by May 15. Snow measurements normally taken near June 1 in the southern half of the state were cancelled since virtually the entire snowpack had melted by this date. In northern Idaho, most snowpacks below the 6,000 ft. elevation are now depleted. Measurements taken at stations above this elevation reported snowpacks ranging from only 15 to 35% of normal as of June 1. The remaining snowpack in north Idaho is expected to be depleted by mid-June.

PRECIPITATION:

Warm and dry weather conditions the first half of May gave way to cooler temperatures and much needed rainfall over much of Idaho the last half of the month. Northern Idaho received the lowest amounts of rain, with totals ranging from 40 to 80% of normal. Central Idaho stations generally reported above to well above average amounts, but the range was from a low of 70% at McCall to 240% at Ketchum. Southwestern Idaho precipitation amounts ranged from 60 to 140% of normal. Rainfall in the eastern and southeastern part of the state was well above average, with many stations reporting more than twice their normal amount of precipitation. Mountain precipitation as reported by SNOTEL followed a similar pattern, ranging from 62% of normal in the Clearwater Basin to 235% in the Great Basin. Temperatures fluctuated widely during May, but the state averaged above normal temperatures for the month.

RESERVOIRS:

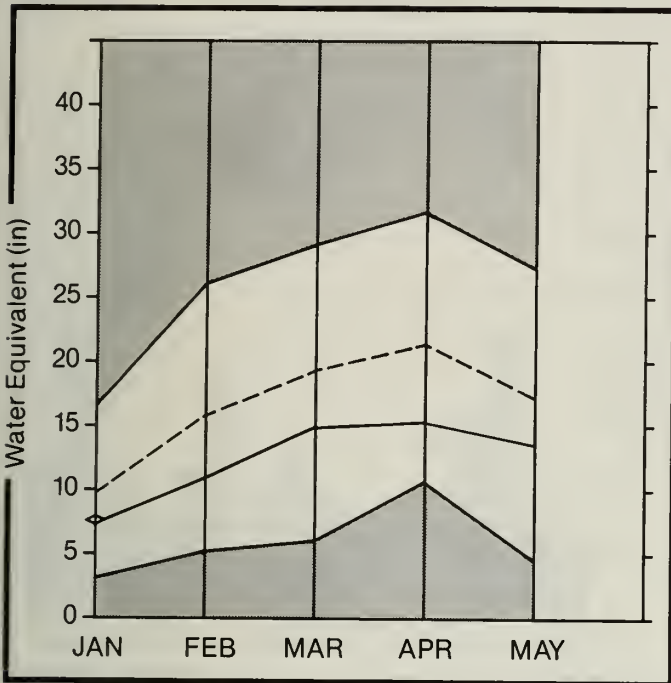
Twenty-three key reservoirs across the state report a combined storage of 107% of average and 89% of capacity. Current storages range from 56% of average in Arrowrock Reservoir to 134% in Mackay Reservoir. Reservoirs in northern Idaho and on the Upper Snake River mainstem show the best storage volumes as of June 1. Well below normal May streamflows and increased irrigation demands resulted in most reservoirs reaching their maximum storage level for the season in early May. Few reservoirs are currently filled to capacity, and many reservoirs in central and southwestern Idaho show a net decrease in storage since May 1. Typically, most reservoirs would be filled to capacity in late May or early June as streams reached their peak flows and begin to recede. Many reservoirs in southwestern Idaho will be empty or nearly empty by late summer. June 1 reservoir storage levels can be found on page 12 of this report.

STREAMFLOW:

Most streams reached peak flow conditions the last week of April and first week of May as the last of the snowpack in the major water producing zones was depleted. In normal years, the major rivers reach peak flow conditions in late May or early June. The early and much lower than normal peak flows resulted in most streams across southern Idaho reporting less than 50% of their normal May flow. Northern Idaho streamflows held up somewhat better, but remained well below normal for May. Heavy precipitation across much of southern Idaho the last half of May helped replenish deficit soil moisture conditions, but provided little surface runoff. Some areas in southern and eastern Idaho, however, did experience flash flood situations as a result of short duration - high intensity rainfall. The improved soil moisture conditions will help maintain higher baseflow conditions for a short period of time until soils begin to dry out. Streamflows for the remainder of the season are expected to be well below normal over most of the state. Well timed and above normal precipitation is needed to avoid critical water shortages in areas of central and southwestern Idaho.

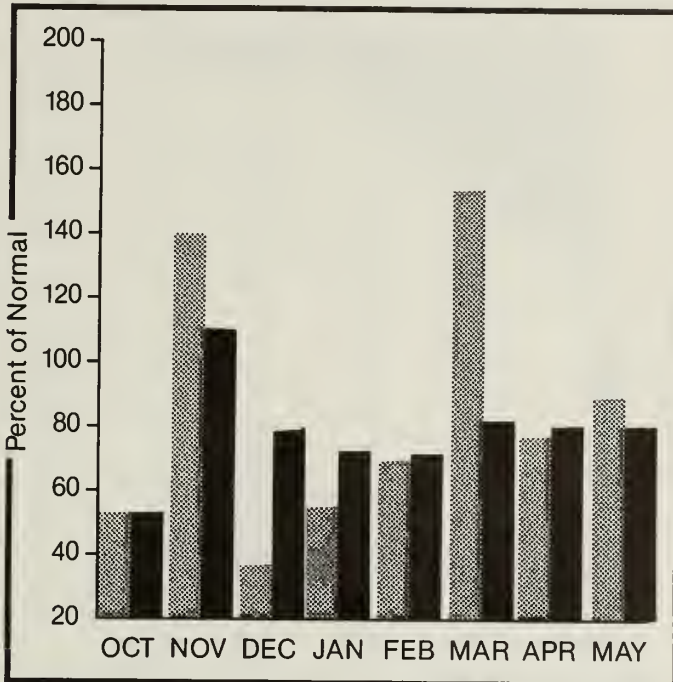
Upper Columbia Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum ——— Average - - - - -
Minimum ——— Current ◊ ———

Monthly precipitation

Year to date precipitation

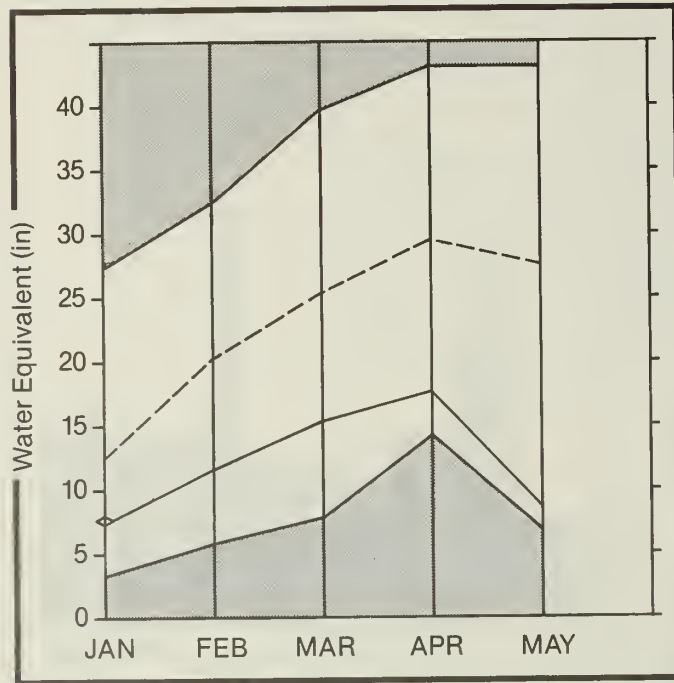
WATER SUPPLY OUTLOOK:

The winter snowpack is now nearly depleted. As of June 1, only a few high elevation sites report any remaining snow cover, but these areas report only 30 to 40% of normal snow water content. Rainfall during May was below normal with mountain stations reporting 60 to 80% of normal precipitation and valley stations reporting 65 to 112%. Streams reached their peak flow conditions about 4 weeks earlier than normal with most streams peaking the last week of April and first week of May. Streamflows the remainder of the season will remain well below normal unless much above average late spring and summer precipitation falls over the basin.

For more information contact your local Soil Conservation Service office.

Clearwater and Salmon River Basin

Mountain snowpack* (inches)



*Based on selected stations

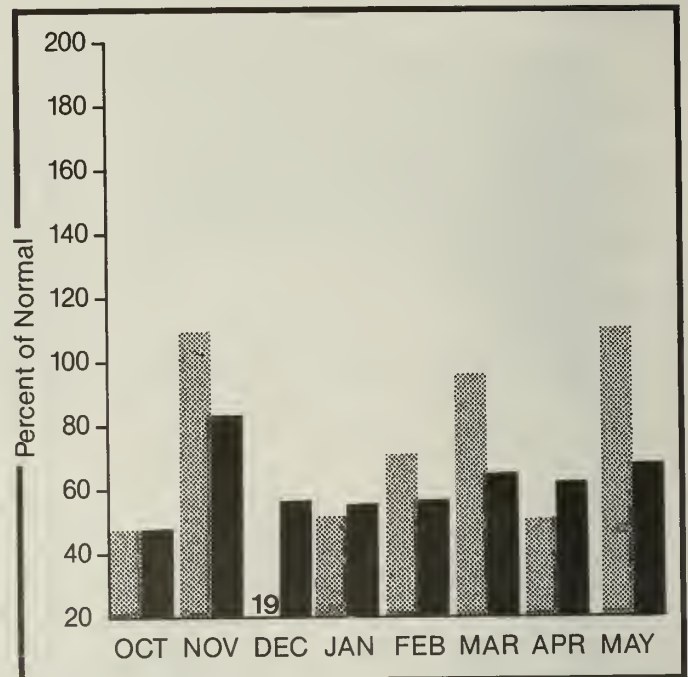
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

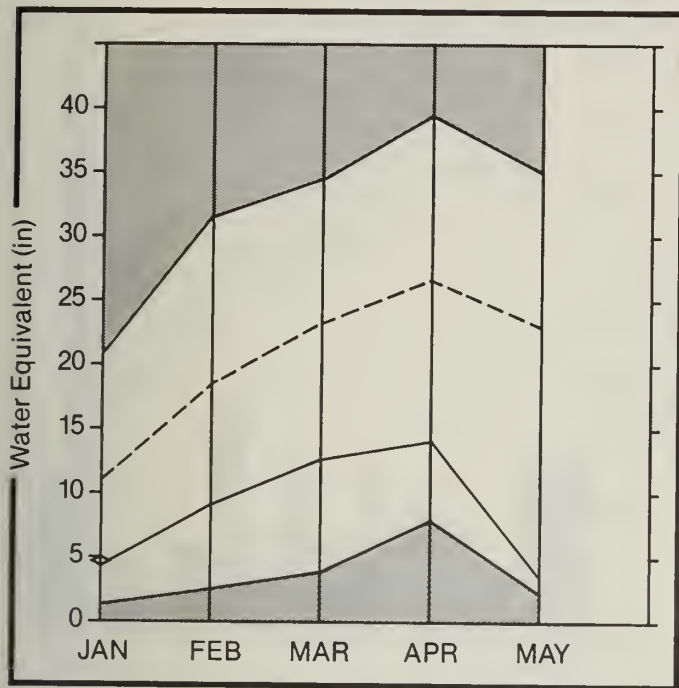
WATER SUPPLY OUTLOOK:

On the Clearwater drainage, only limited amounts of snow remain on north facing slopes and in protected areas above the 6,000 ft. level. Snow measurements at selected sites above this elevation report 15 to 30% of normal snowpack. Snowpacks on the Salmon drainage are virtually depleted with no stations reporting any snowcover. May precipitation was below to well below average on the Clearwater basin and above to well above average over much of the Salmon basin. Mountain SNOTEL precipitation stations on the Clearwater reported 50 to 60% of normal rainfall, while stations on the Salmon reported 150 to 165% of normal. Valley precipitation ranged from 80 to 115% on the Clearwater and 74 to 233 on the Salmon. Streamflows peaked in both basins near May 1 and well below normal flows are expected for the remainder of the season.

For more information contact your local Soil Conservation Service office.

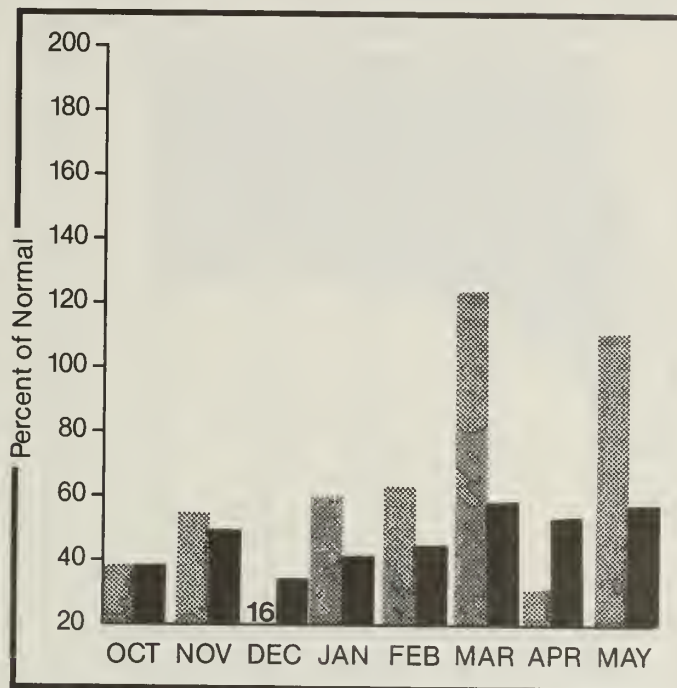
Weiser, Payette, and Boise River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum ——— Average - - - - -
Minimum ——— Current ◊ ———

Monthly precipitation

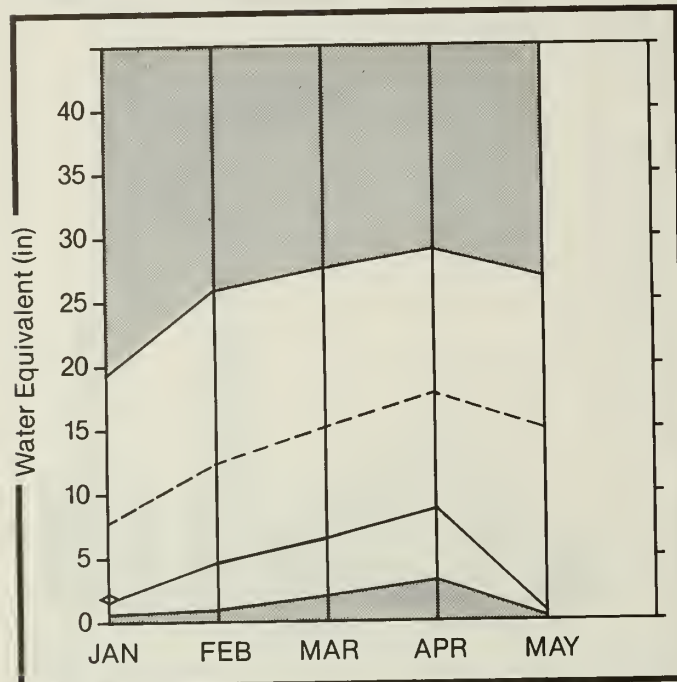
Year to date precipitation

WATER SUPPLY OUTLOOK:

Snow measurements normally taken near June 1 in the basin were cancelled since virtually the entire snowpack was depleted by May 15. May precipitation varied widely over the basin. Mountain SNOTEL precipitation stations reported near normal rainfall with the exception of Bennett Mountain near Mountain Home reporting only 22% of average and Cozy Cove near Deadwood Dam reporting 164% of average. Valley precipitation was generally above normal in the mountain valleys and below normal in the agricultural irrigated areas. Streamflows peaked near May 1, nearly 4 weeks earlier than normal. May streamflow volumes were 30 to 50% of normal and flows for the remainder of the season will be very low. Reservoirs are now being drafted to meet the increasing irrigation demands. Reservoirs on the Boise system report a net decrease since May 1. Typically these reservoirs fill in late May or early June. Well timed and above normal rainfall will be needed to avoid critical water shortages in some areas.

Big Wood, Little Wood, Big Lost, and Little Lost River Basin

Mountain snowpack* (inches)



*Based on selected stations

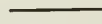
Maximum



Average



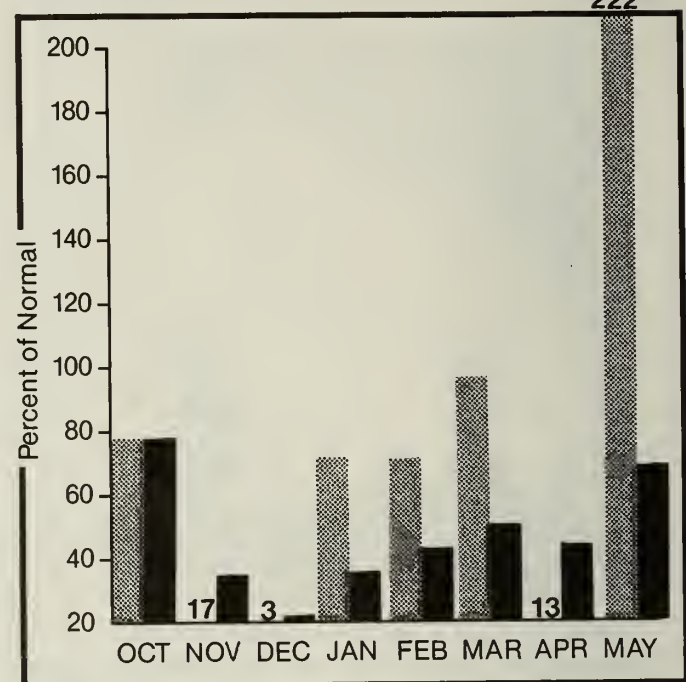
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation

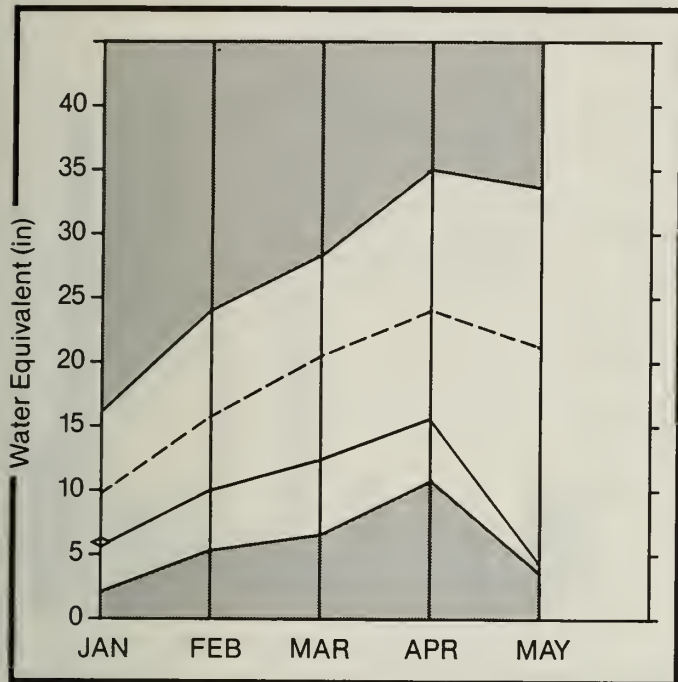


WATER SUPPLY OUTLOOK:

Little or no snow remained in the basin by mid-May and snow measurements normally taken near June 1 were cancelled. Precipitation during May was well above normal with most of the rainfall coming in the last half of the month. The rain helped replenish the deficit soil moisture conditions and temporarily reduced irrigation demands, but provided little surface runoff. May streamflow volumes were less than half of normal and peak flows occurred near May 1, nearly a month earlier than normal. Reservoirs are being drafted to meet irrigation demands with Carey Valley, Little Wood, and Magic reservoirs all reporting a net decrease in available water since May 1. These reservoirs are expected to be empty or nearly empty by late summer. Mackay reservoir remained full on June 1. Streamflows will be very low for the remainder of the season and well timed, above average precipitation will be needed to avoid critical shortages.

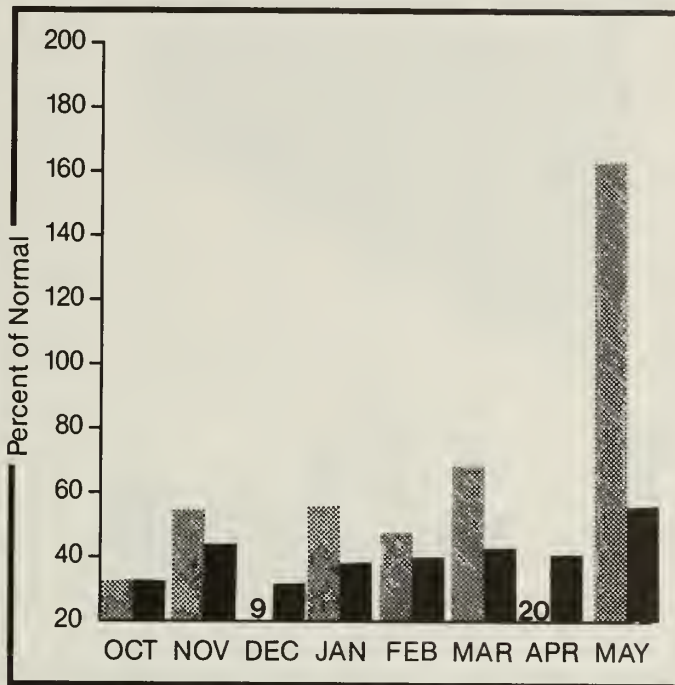
Willow Creek, Blackfoot, Upper Snake, and Portneuf River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum Average
Minimum Current

Monthly precipitation

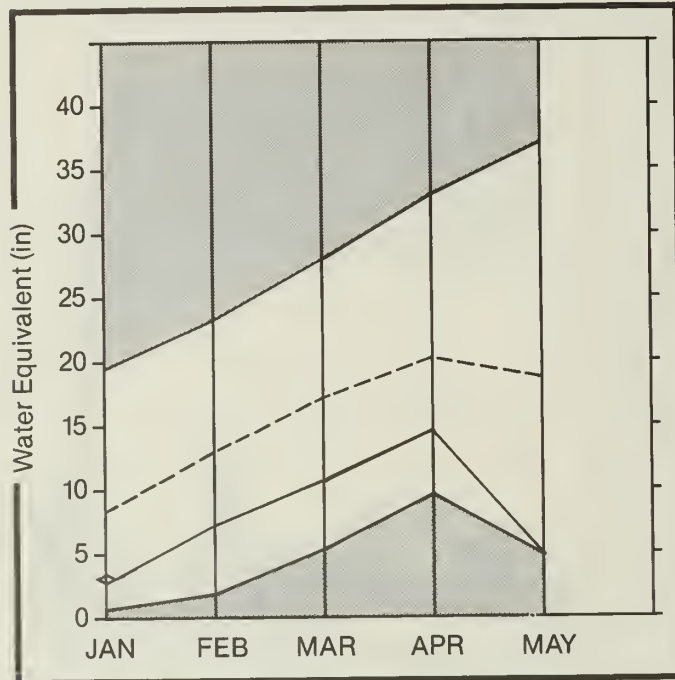
Year to date precipitation

WATER SUPPLY OUTLOOK:

Snow measurements normally taken near June 1 were cancelled since virtually the entire snowpack was depleted by this date. Rainfall during May was well above normal in the mountainous areas, ranging from 150 to 250% of average, and near to slightly below normal in the valleys, ranging from 75 to 115% of average. The well above average precipitation provided much needed relief to dryland areas and helped replenish below normal soil moisture conditions. Some streams experienced flash flooding as a result of intense short duration thunderstorm activity. Streamflow snowmelt peaks occurred in early May, about 4 weeks earlier than usual. As a result, May flows were well below average and flows for the remainder of the season are expected to remain low. Most reservoirs are filled or nearly filled to capacity and water supplies should be adequate for most areas this season.

Southside Snake River Basin

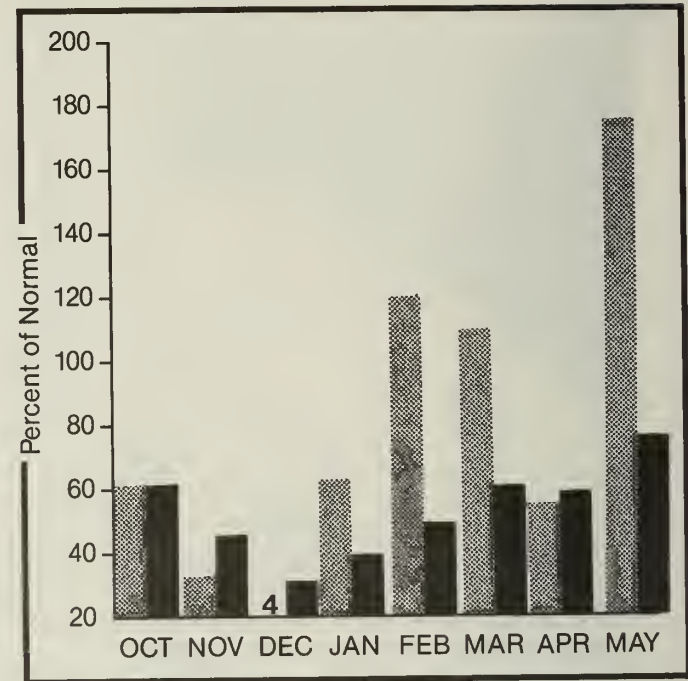
Mountain snowpack* (inches)



*Based on selected stations

Maximum ——— Average - - - - -
Minimum ——— Current ◊ ———

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation [hatched bar] Year to date precipitation [solid black bar]

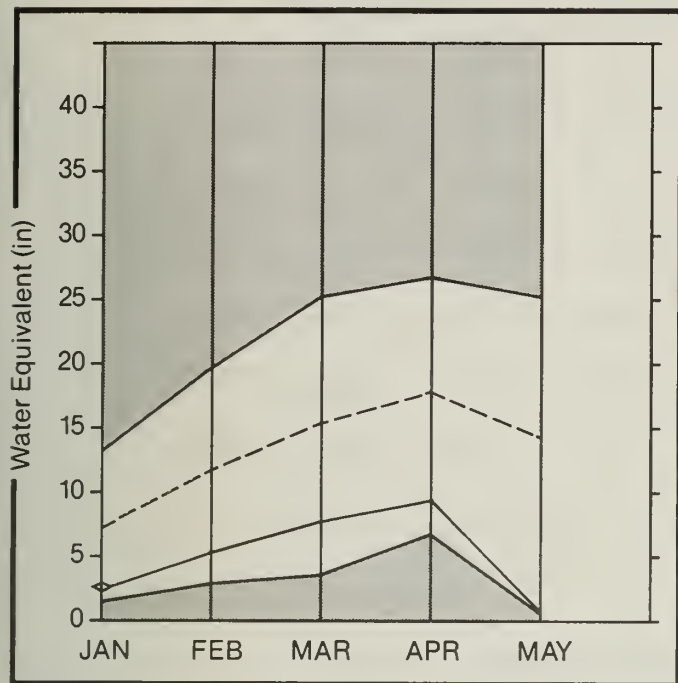
WATER SUPPLY OUTLOOK:

Most winter snowpack in the basin was depleted by early May except in the higher elevations of the Jarbridge Mountains where snow remained on north facing slopes and protected areas until mid-May. Precipitation for May varied from slightly below normal in the Owyhee and Bruneau River drainages on the west end of the basin to well above normal over the eastern half of the basin. Heavy thunder shower activity produced localized flash flooding in areas south and east of Twin Falls and Burley, and provided some additional surface runoff into Salmon Falls and Oakley reservoirs. The much needed rainfall also helped replenish deficit soil moisture conditions in the basin and provided temporary relief to dryland areas.

For more information contact your local Soil Conservation Service office.

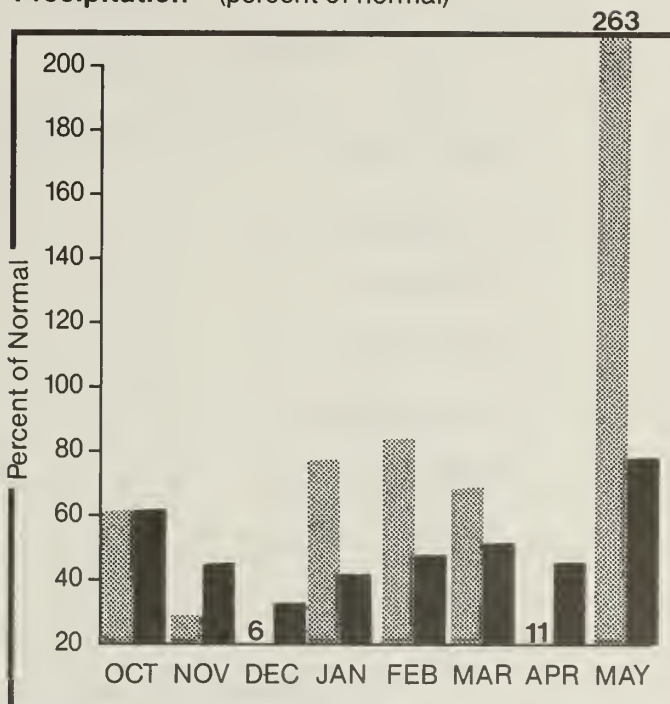
Great Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum ——— Average - - - - -
Minimum ——— Current ◇——

Monthly precipitation [Patterned Bar] Year to date precipitation [Solid Black Bar]

WATER SUPPLY OUTLOOK:

May brought above normal precipitation to the basin for the first time since the water year began last October. Rainfall during May was well above normal with most valley and mountain SNOTEL stations reporting over 250% of normal accumulations. The much needed rainfall temporarily reduced irrigation demands and helped replenish the deficit soil moisture conditions -- providing relief to dryland areas. Streamflows returned to summer baseflow conditions in early May as the last of the winter's snowpack was depleted. Streams remained low during the month indicating that the heavy precipitation produced little surface runoff. Baseflows, however, should maintain somewhat better than previously expected with the improved soil moisture conditions. Water will remain in short supply for this season and well timed normal or above normal precipitation is needed to reduce demands.

UPPER COLUMBIA RIVER BASIN

RESERVOIR STORAGE (1000AF)				
RESERVOIR	USEABLE I CAPACITY I	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
HUNGRY HORSE	3451.0	3264.0	2230.0	2663.0
FLATHEAD LAKE	1791.0	1596.0	1568.0	1468.0
PEND OREILLE	1561.2	1405.4	1420.2	1278.5
NOXON RAPIDS	335.0	328.0	333.0	270.4
COEUR D'ALENE	291.2	280.2	219.8	353.9
PRIEST LAKE	97.7	99.8	71.8	123.5

CLEARWATER AND SALMON RIVER BASIN

RESERVOIR STORAGE (1000AF)				
RESERVOIR	USEABLE I CAPACITY I	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
DWORSHAK	3467.8	3389.0	3042.7	2987.3

WEISER, FAYETTE AND BOISE RIVER BASIN

RESERVOIR STORAGE		(1000AF)		
RESERVOIR	USEABLE I CAPACITY I	** USEABLE STORAGE ** THIS I YEAR	LAST YEAR	AVG.
MANN CREEK	11.3	9.6	11.3	10.8
CASCADE	703.2	629.5	483.0	548.7
DEADWOOD	162.0	142.6	138.6	136.2
ANDERSON RANCH	464.2	395.2	447.2	413.3
ARROWROCK	286.6	120.2	196.2	216.3
LUCKY PEAK	307.0	293.8	231.6	225.9
LAKE LOWELL (DEER FLAT)	177.0	139.5	167.6	159.0

BIG WOOD, LITTLE WOOD, BIG LOST AND LITTLE LOST RIVER BASIN

RESERVOIR STORAGE		(1000AF)		
RESERVOIR	USEABLE I CAPACITY I	** USEABLE STORAGE ** THIS I YEAR	LAST YEAR	AVG.
MAGIC	191.5	121.4	186.0	173.8
LITTLE WOOD	30.0	28.0	30.2	28.0
CAREY VALLEY	14.4	5.8	13.9	---
MACKAY	44.4	45.0	44.0	33.6

WILLOW CREEK, BLACKFOOT, UPPER SNAKE AND PORTNEUF RIVER BASIN

RESERVOIR STORAGE		(1000AF)		
RESERVOIR	USEABLE I CAPACITY I	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
ISLAND PARK	127.6	136.0	133.5	134.4
GRASSY LAKE	15.2	15.2	14.0	13.5
JACKSON LAKE	624.4	284.2	93.9	567.9
PALISADES	1357.0	1352.2	652.3	993.9
AMERICAN FALLS	1700.0	1426.4	1606.4	1519.3
BROWNLEE	975.3	902.9	606.4	756.8
BLACKFOOT	NO REPORT			
HENRY'S LAKE	90.4	90.0	---	84.6
RIRIE	96.5	72.1	---	83.9

SOUTHSIDE SNAKE RIVER BASIN

RESERVOIR STORAGE		(1000AF)		
RESERVOIR	USEABLE I CAPACITY I	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
OAKLEY	77.4	31.1	59.9	42.7
SALMON FALLS	182.6	88.4	156.5	94.9
OWYHEE	715.0	459.0	714.0	599.6

GREAT BASIN

RESERVOIR STORAGE (1000AF)				
RESERVOIR	USEABLE I CAPACITY I	** USEABLE STORAGE **		
	I	THIS YEAR	LAST YEAR	AVG.
BEAR LAKE	1421.0	1128.0	1216.2	1145.5
MONTPELIER CREEK	3.9	3.4	2.1	3.4

SNOW DATA MEASUREMENTS

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
COOL CREEK	6250	5/29/87	21	10.0	29.4	32.2
LOST LAKE	6110	5/29/87	15	7.4	23.4	44.7
SCHWEITZER BASIN	6090	5/28/87	19	10.9	13.1	25.1
SCHWEITZER RIDGE	6200	5/28/87	17	9.2	5.7	30.0
TOGWOTEE PASS	9580	6/01/87	12	4.4	35.1	25.8

The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State

Idaho Department of Water Resources
Soil and Water Conservation Districts of Idaho

Federal

U.S. Department of Agriculture
Forest Service
U.S. Department of Army
Corps of Engineers
U.S. Department of Commerce
NOAA, National Weather Service
U.S. Department of Interior
Bureau of Reclamation
Geological Survey, Water Resources Division
Shoshone-Bannock Tribal Council

Local

Big Lost River Irrigation District
Big Wood Irrigation Company
Boise Project Board of Control
Idaho Water District #01
Lewiston Orchards Irrigation District
Little Wood River Irrigation District
North Board of Control — Owyhee Project
Salmon Falls Irrigation Company
South Board of Control — Owyhee Project

Private

Cyprus Mining Company
FMC Corporation
Idaho Power Company
Le Bois Resort
Washington Water Power Company

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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**Idaho
Water Supply Outlook**

and

Federal — State — Private
Cooperative Snow Surveys



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United States
Department of
Agriculture

Soil
Conservation
Service

Boise,
Idaho



Idaho Water Supply Outlook

January 1, 1988



Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are terms reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola, Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Denver, CO 80211
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 87102-3157
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97204
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201-1080
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209.

Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Idaho Water Supply Outlook

and

Federal — State — Private Cooperative Snow Surveys

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Director
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Boise, Idaho

THE
HISTORY OF THE
CITY OF BOSTON

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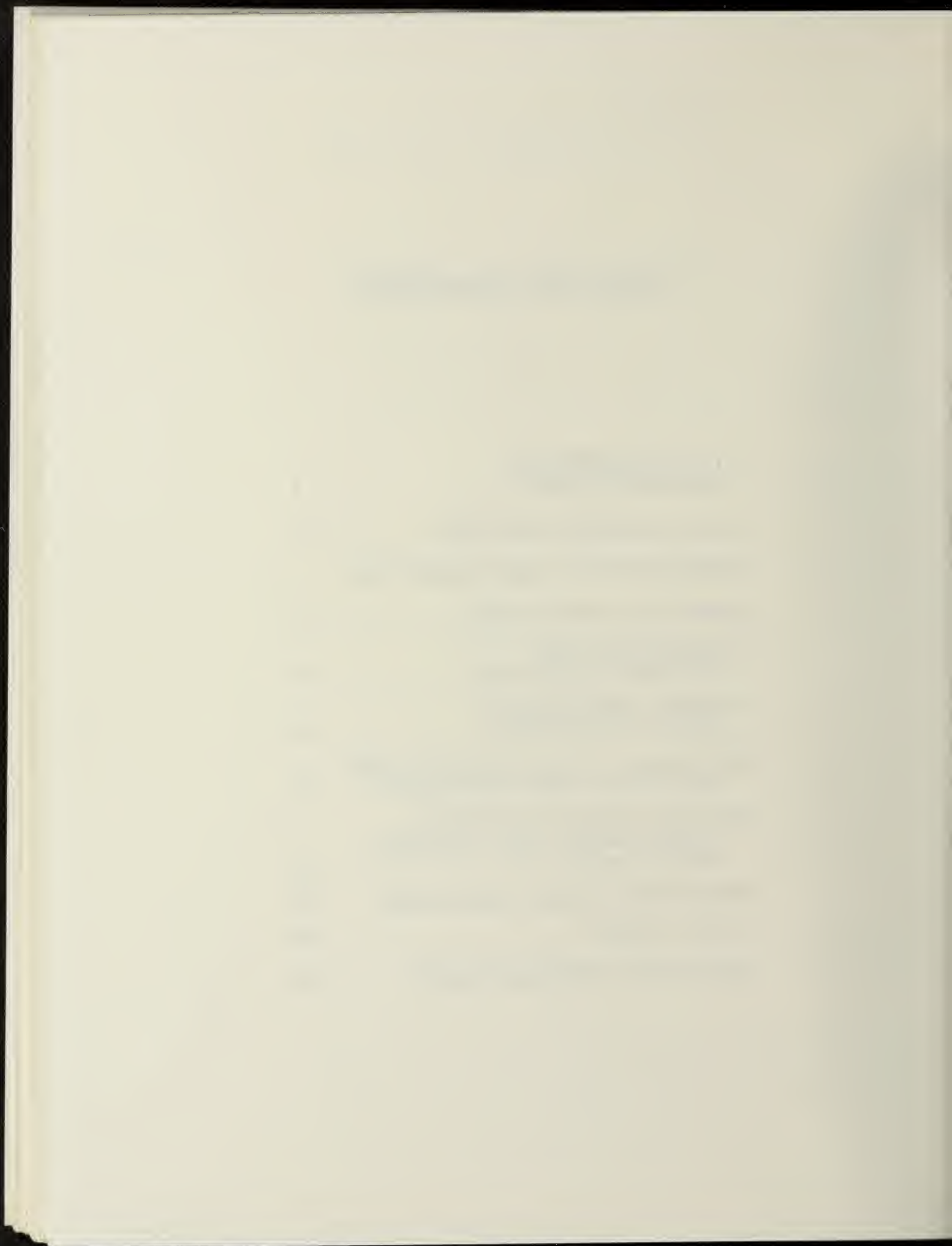
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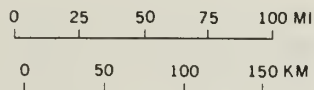
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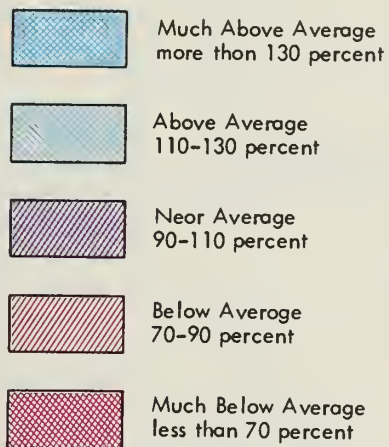
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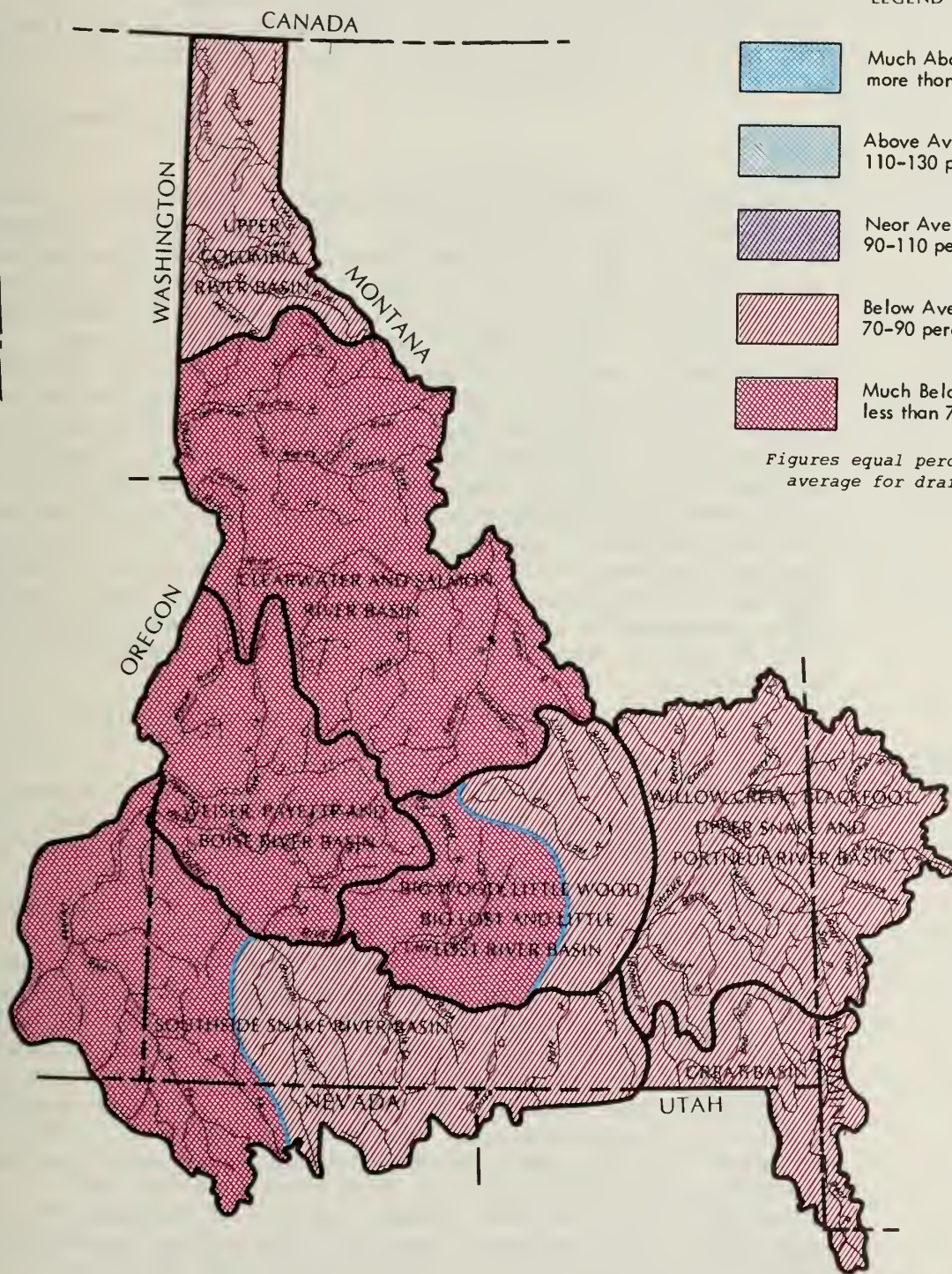
STREAMFLOW PROSPECTS IDAHO



LEGEND



Figures equal percent of average for drainage.



GENERAL OUTLOOK

SUMMARY:

IDAHO'S MOUNTAIN SNOWPACK IS WELL BELOW NORMAL FOR THE SECOND YEAR IN A ROW. SNOW SURVEYS CONDUCTED BY THE SCS REPORT ONLY ABOUT HALF OF THE NORMAL SNOWPACK FOR THIS TIME OF YEAR. AS A RESULT OF THE LOW SNOWPACK AND DRY SOIL MOISTURE CONDITIONS, SPRING AND SUMMER STREAMFLOW FORECASTS ARE BELOW NORMAL AS WELL. RESERVOIR STORAGE IS LOWER THAN NORMAL DUE TO THE HIGH DEPENDENCE ON STORED IRRIGATION WATER DURING LAST YEAR'S DROUGHT. THE MOUNTAIN PRECIPITATION IN THE NEXT FEW MONTHS WILL LARGELY DETERMINE THE FATE OF IDAHO'S 1988 WATER SUPPLY.

SNOWPACK:

Snow Surveys taken near January 1, 1988 show Idaho's snowpack to be below to well below normal throughout the state. In northern Idaho, from the Clearwater drainage north, snowpack conditions range from 46-64% of normal except on the Priest River drainage which reports 71% of normal snowpack. Central Idaho watersheds report snowpacks ranging from a low of 43 to a high of 74% of average with most basins in the 50-65% of normal range. Most basins in the Upper Snake River drainage above American Falls report snowpacks ranging from 56 to 79% of average. Snowpacks in the Upper Bear River and its tributaries in southeastern Idaho range from 56-63% of average. Basins on the south side of the Snake River from the Owyhee Mountains eastward to the Raft River drainage show snowpacks ranging from 54-85% of average with the Jarbidge Mountains reporting the highest percentages.

PRECIPITATION:

Precipitation amounts over Idaho for the October through December period have been below to well below normal. Rainfall during October was light over the southeastern and northern part of the state. November brought near to above normal precipitation to southcentral and southeast Idaho, but the remainder of the state received below to well below normal amounts. The Panhandle averaged from 27-67% for the month. Central Idaho received 45-75% while southwest Idaho received 60-80%. December brought improved precipitation patterns and a wide range of precipitation amounts to the state. On the average, however, the state was again below normal. The extreme north Idaho Panhandle received near or above normal precipitation for the month while the remainder of northern Idaho received 50-62% of average. The central part of the state received 75-85%, southwestern Idaho was rather uniform at 75% of normal, southcentral received 90-100%, and southeastern Idaho ranged from 126% at Pocatello to 50% at Grace.

RESERVOIRS:

The low streamflow volumes in 1987 coupled with below normal precipitation last summer and fall has left most reservoirs with below to well below normal carryover storage. The combined storage in 26 key reservoirs across the state is 74% of normal and only 48% of capacity. Storage figures range from a low of 11% of average (5% of capacity) for Magic Reservoir to a high of 106% of average (74% of capacity) for Island Park Reservoir.

STREAMFLOW:

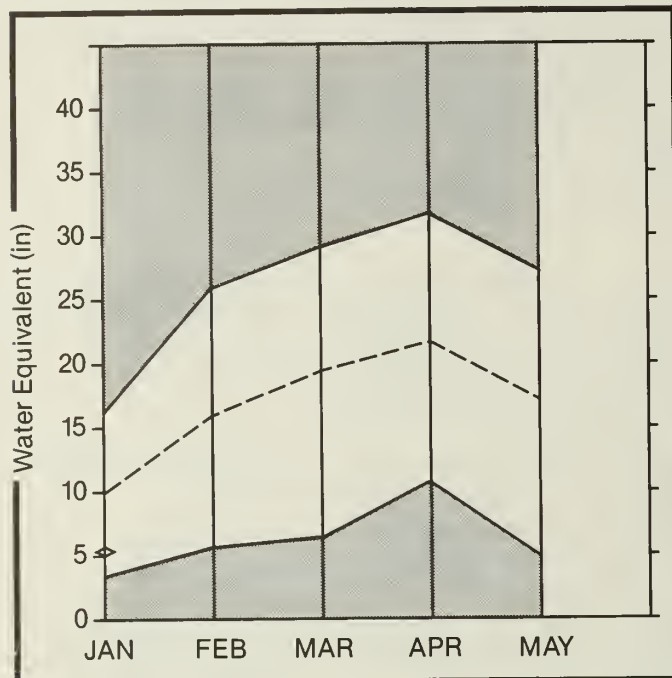
Apr-July seasonal volume streamflows are forecast to be below to well below normal throughout the state with most forecasts falling between 65 and 75% of average. The lowest projections are found in north-central, central, and southwestern Idaho. In northern Idaho, forecasts range from a low of 64% of average on the Clearwater at Orofino to a high of 75% on the Priest River near Priest. Central Idaho forecasts range from 60% of average for the Weiser near Weiser to 76% of average for the Little Lost near Howe. Basins in the Upper Snake range from a low of 68% of normal for the Henrys Fork near Rexburg to 78% of average on the Teton above S. Leigh Creek. Forecasts for drainages on the south side of the Snake range from 50% of average for inflow to Owyhee Reservoir to 83% for the Bruneau near Hot Spring. Streamflows on the Bear River and its tributaries are forecasted between 66 & 77% of normal.

SOIL MOISTURE:

The below normal precipitation patterns which have existed over much of the state though the summer and fall have left most soil profiles very dry. Below normal soil moisture conditions exist over much of northern Idaho, while well below normal conditions exist in the central and southwestern part of the state. Conditions improve in the eastern portion of the state, but remain below normal except in the Bear River drainage where soil moisture conditions are near normal.

Upper Columbia Basin

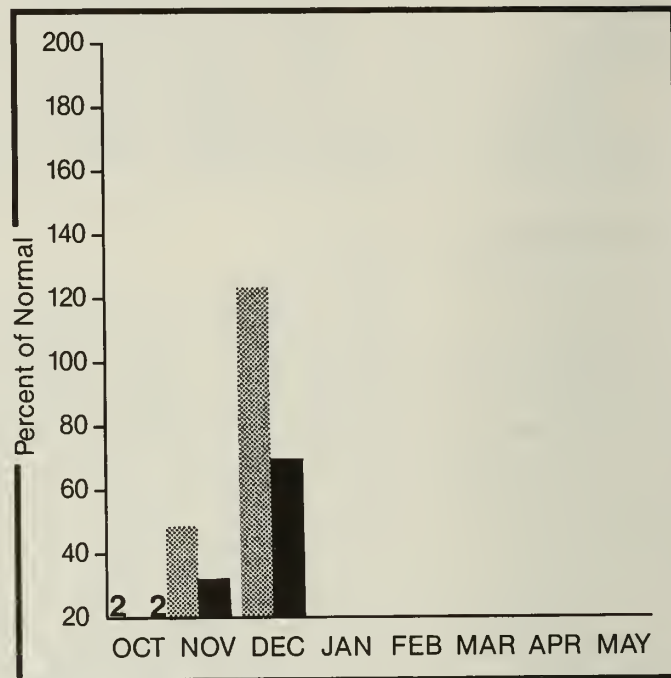
Mountain snowpack* (inches)



*Based on selected stations

Maximum ——— Average - - - -
Minimum ——— Current ———

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation [hatched bar] Year to date precipitation [solid black bar]

WATER SUPPLY OUTLOOK:

Snowpack conditions in the Idaho Panhandle are generally well below normal, ranging from 46% to 52% of average on all basins except the Priest River drainage which reports 71% of normal snowpack. Apr-July seasonal volume streamflows are currently forecasted to be below normal, ranging from 72 to 75% of average. Reservoir storage is also below normal for this time of year, ranging from a low of 53% of average in Lake Coeur d'Alene to 93% in Priest Lake.

For more information contact your local Soil Conservation Service office.

UPPER COLUMBIA RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
KOOTENAI at Leonia 2	APR-SEP	8441.0	6490.0	77	9110.0	108	3870.0	46
	APR-JUL	7340.0	5640.0	77	7920.0	108	3360.0	46
	APR-JUN	5899.0	4540.0	77	6370.0	108	2710.0	46
CLARK FORK at White Horse Rapids 2	APR-SEP	13370.0	8960.0	67	14300.0	107	3610.0	27
	APR-JUL	12150.0	8140.0	67	13000.0	107	3280.0	27
	APR-JUN	10360.0	6940.0	67	11100.0	107	2800.0	27
PEND OREILLE LAKE inflow 2	APR-SEP	14930.0	10000.0	67	16000.0	107	4030.0	27
	APR-JUL	13650.0	9140.0	67	14600.0	107	3680.0	27
	APR-JUN	11780.0	7890.0	67	12600.0	107	3180.0	27
PRIEST RIVER at Priest 2	APR-SEP	893.0	670.0	75	1010.0	113	330.0	37
	APR-JUL	838.0	630.0	75	950.0	113	310.0	37
SPOKANE at Post Falls	APR-SEP	2820.0	2080.0	74	3520.0	125	640.0	23
SPOKANE at Post Falls 2	APR-JUL	2723.0	1950.0	72	3340.0	123	560.0	21
ST. JOE at Calder	APR-SEP	1281.0	960.0	75	1380.0	108	535.0	42
	APR-JUL	1211.0	885.0	73	1290.0	107	485.0	40
COEUR D' ALENE at Enaville	APR-SEP	830.0	595.0	72	1000.0	120	190.0	23
	APR-JUL	789.0	565.0	72	950.0	120	180.0	23

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
HUNGRY HORSE	3451.0	2039.0	2613.0	2649.0	Kootenai ab Bonners Ferry	25	62	55
FLATHEAD LAKE	1791.0	929.0	1099.0	1340.0	Pend Oreille River	118	69	55
PEND OREILLE	1155.0	544.7	147.2	744.9	Clark Fork River	83	75	57
NOXON RAPIDS	335.0	320.5	313.2	318.1	Priest River	5	91	71
COEUR D'ALENE	222.8	110.0	134.2	207.7	Rathdrum Creek	0	0	0
PRIEST LAKE	97.7	32.8	32.8	35.2	Havden Lake	0	0	0
					Coeur d'Alene River	8	58	46
					St. Joe River	8	64	52
					Spokane River	16	62	49
					Palouse River	0	0	0

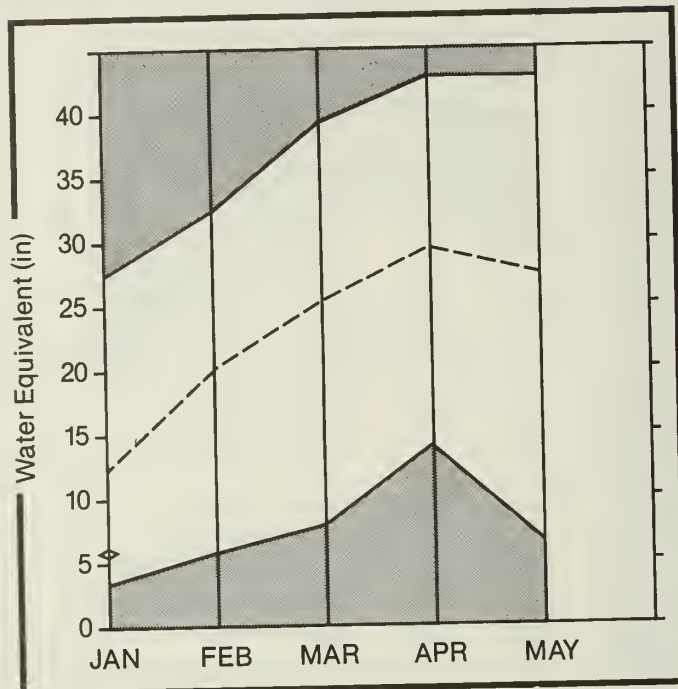
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

Clearwater and Salmon River Basin

Mountain snowpack* (inches)



*Based on selected stations

Maximum



Average



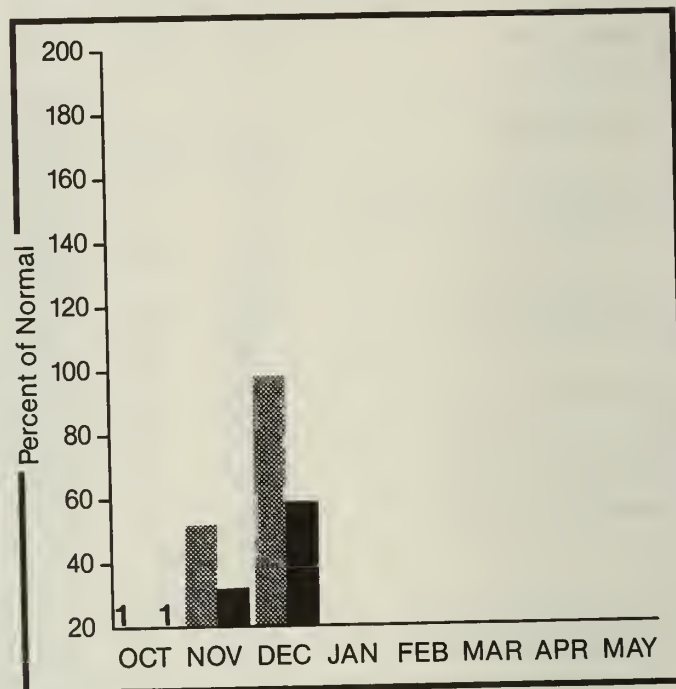
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Well below normal snowpack conditions exist throughout the basin. In the Clearwater drainage, snowpacks range from 47% of average on the North Fork of the Clearwater to 64% on the Lochsa basin. The Salmon River drainage reports snowpacks ranging from 54 to 63% of average. Apr-July seasonal volume streamflows are forecast to be below normal, ranging from 64% for the Clearwater at Orofino to 71% for the Salmon near Whitebird. Dworshak reservoir carryover storage is reported to be 83% of normal and 58% of capacity.

For more information contact your local Soil Conservation Service office.

CLEARWATER AND SALMON RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
CLEARWATER at Orofino	APR-SEP	5163.0	3310.0	64	5630.0	109	985.0	19
	APR-JUL	4889.0	3130.0	64	5330.0	109	930.0	19
CLEARWATER at Spalding	APR-SEP	8378.0	5450.0	65	9390.0	112	1510.0	18
	APR-JUL	7916.0	5140.0	65	8860.0	112	1420.0	18
DWORSHAK RESERVOIR inflow	APR-SEP	3010.0	2110.0	70	3430.0	114	785.0	26
	APR-JUL	2822.0	1970.0	70	3210.0	114	730.0	26
SALMON at Whitebird	APR-SEP	7007.0	4980.0	71	7640.0	109	2320.0	33
	APR-JUL	6322.0	4510.0	71	6910.0	109	2110.0	33
SALMON at Salmon	APR-SEP	1077.0	735.0	68	1280.0	119	195.0	18
	APR-JUL	919.0	625.0	68	1090.0	118	165.0	18

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
DWORSHAK	3467.8	2011.5	2424.5	2431.0	North Fork Clearwater	13	65	47
					Lochsa River	4	88	64
					Selwav River	4	88	57
					Clearwater River	18	73	52
					Salmon River ab Salmon	7	132	63
					Lemhi River	2	103	70
					Salmon River Total	22	110	55

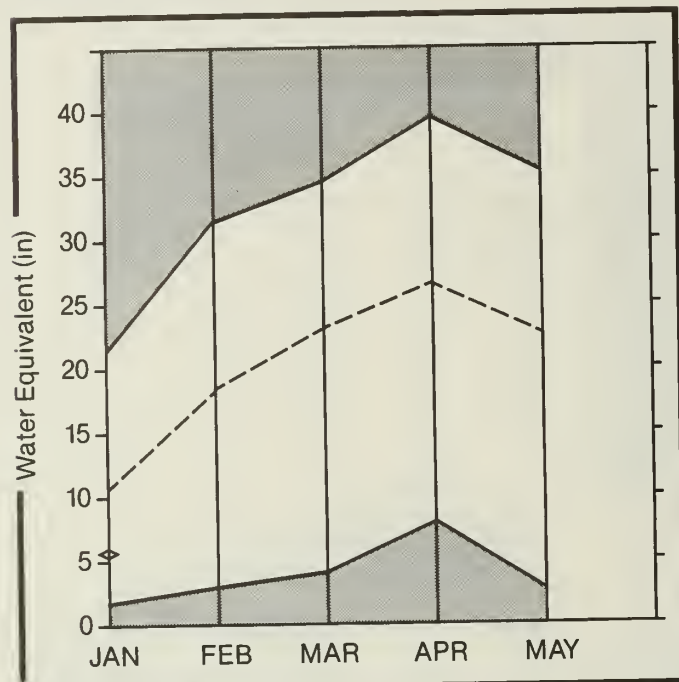
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2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

Weiser, Payette, and Boise River Basin

Mountain snowpack* (inches)



*Based on selected stations

Maximum



Average



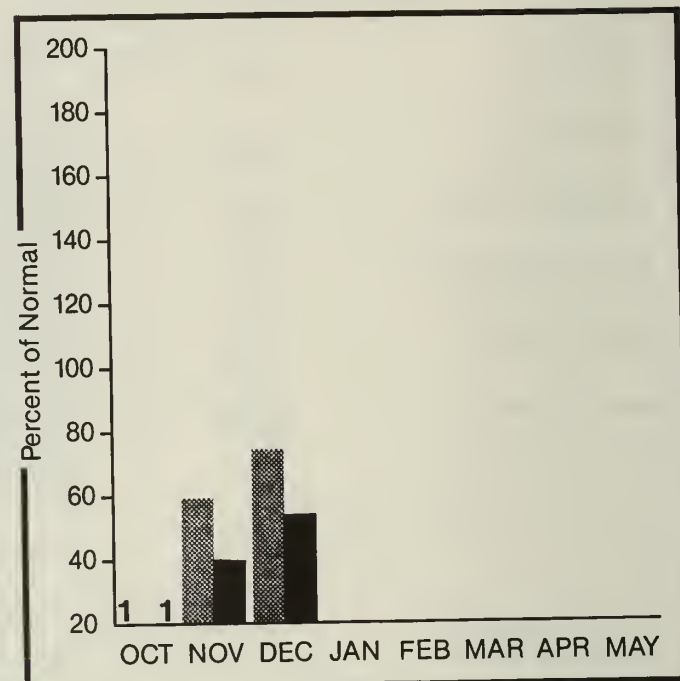
Minimum



Current



Precipitation* (percent of normal)

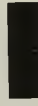


*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

January 1 snow surveys show snowpack conditions to be much below normal, ranging from only 46% of average on the N. F. Payette to 55% on the South and Middle Forks of the Boise. Apr-July seasonal volume streamflows are forecast to be below normal ranging from 60% for the Weiser near Weiser to 71% for the Boise River near Twin Springs. Reservoir carryover storage is reported to be below to well below average throughout the basin ranging from a low of 26% of normal in Mann Creek reservoir near Weiser to 85% in Cascade reservoir. Soil moisture conditions are also well below normal as a result of the dry summer and fall weather conditions.

For more information contact your local Soil Conservation Service office.

WEISER, PAYETTE AND BOISE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
WEISER nr Weiser	APR-SEP	444.0	265.0	60	470.0	106	61.0	14
	APR-JUL	414.0	250.0	60	440.0	106	60.0	14
PAYETTE RIVER at Horseshoe Bend	APR-SEP	1862.0	1270.0	68	1830.0	98	710.0	38
	APR-JUL	1717.0	1170.0	68	1690.0	98	655.0	38
NF PAYETTE RIVER at Cascade 2	APR-SEP	568.0	385.0	68	525.0	92	240.0	42
	APR-JUL	531.0	355.0	67	490.0	92	220.0	41
NF PAYETTE RIVER nr Banks 2	APR-SEP	737.0	500.0	68	720.0	98	280.0	38
	APR-JUL	691.0	470.0	68	680.0	98	260.0	38
SF PAYETTE RIVER at Lowman	APR-SEP	516.0	360.0	70	515.0	100	205.0	40
	APR-JUL	458.0	320.0	70	455.0	99	180.0	39
DEADWOOD RESERVOIR inflow	APR-JUL	143.0	100.0	70	163.0	114	37.0	26
BOISE RIVER nr Twin Springs 1	APR-SEP	722.0	510.0	71	785.0	109	235.0	33
	APR-JUL	664.0	470.0	71	720.0	108	220.0	33
SF BOISE at Anderson Dam 1	APR-SEP	619.0	420.0	68	635.0	103	200.0	32
	APR-JUL	578.0	395.0	68	600.0	104	195.0	34
BOISE RIVER nr Boise 1	APR-SEP	1628.0	1140.0	70	1840.0	113	440.0	27
	APR-JUL	1508.0	1060.0	70	1710.0	113	410.0	27
	APR-JUN	1334.0	935.0	70	1510.0	113	360.0	27

RESERVOIR STORAGE		(1000AF)			WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
MANN CREEK	11.3	1.1	2.7	4.2	Mann Creek	1	147	45
CASCADE	703.2	356.5	462.7	419.7	Weiser River	4	123	47
DEADWOOD	162.0	60.0	83.4	73.7	North Fork Payette	10	86	47
ANDERSON RANCH	464.2	129.0	367.3	319.9	South Fork Payette	7	131	52
ARROWROCK	286.6	97.2	193.2	193.8	Payette River Total	16	102	49
LUCKY PEAK	307.0	72.9	59.2	94.5	Middle & North Fork Boise	9	150	55
LAKE LOWELL (DEER FLAT)	177.0	86.3	129.1	126.0	South Fork Boise River	10	226	55
					Boise River Total	19	165	50
					Canyon Creek	2	160	28

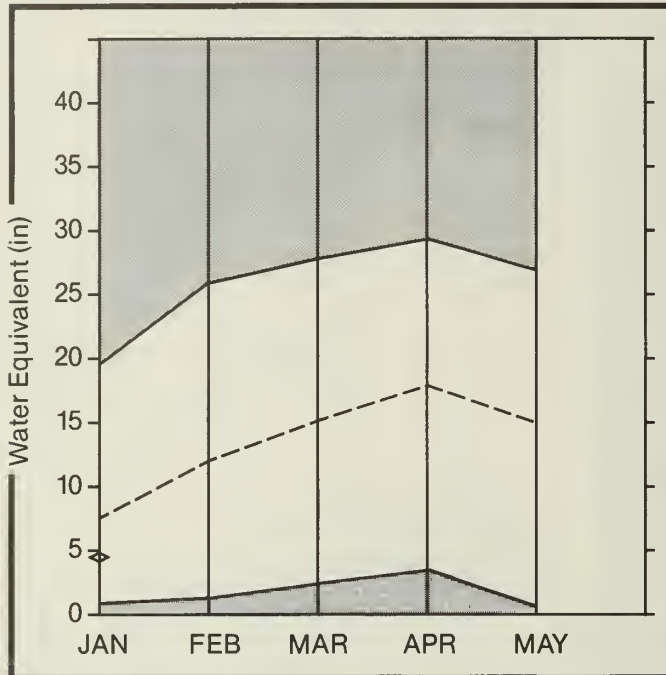
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2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

Big Wood, Little Wood, Big Lost, and Little Lost River Basin

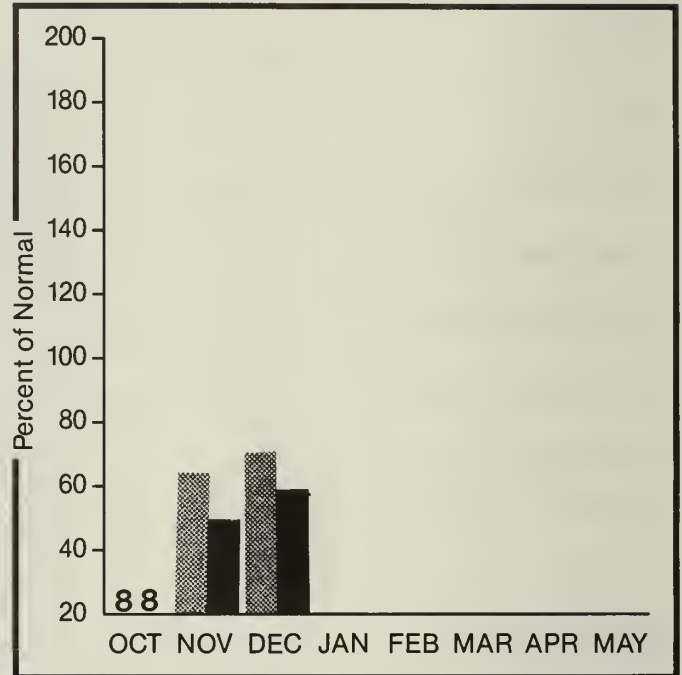
Mountain snowpack* (inches)



*Based on selected stations

Maximum ——— Average - - - -
Minimum ——— Current ———

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation (hatched bar) Year to date precipitation (solid black bar)

WATER SUPPLY OUTLOOK:

January 1 snowpack conditions are below to well below normal throughout the basin ranging from only 43% of average on the Camas Creek drainage near Fairfield to 74% on the Little Lost River. Soils are very dry and can be expected to absorb significant amounts of water when snowmelt begins this spring. Water supply forecasts for the Apr-July period are below normal ranging from 68% for the Little Wood near Carey to 76% for the Little Lost near Howe. Reservoir carryover storage is also below normal, ranging from only 11% of average in Magic Reservoir to 78% of average in Mackay Reservoir.

For more information contact your local Soil Conservation Service office.

BIG WOOD, LITTLE WOOD, BIG LOST AND LITTLE LOST RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BIG WOOD nr Bellevue	APR-SEP	217.0	150.0	69	215.0	99	83.0	38
	APR-JUL	202.0	141.0	70	205.0	101	78.0	39
MAGIC RESERVOIR inflow	APR-SEP	338.0	235.0	70	410.0	121	59.0	17
	APR-JUL	322.0	225.0	70	390.0	121	58.0	18
LITTLE WOOD nr Carey	APR-SEP	107.0	73.0	68	110.0	103	36.0	34
	APR-JUL	99.0	67.0	68	102.0	103	32.0	32
BIG LOST at Howell Ranch	APR-SEP	219.0	158.0	72	245.0	112	70.0	32
	APR-JUL	192.0	138.0	72	215.0	112	61.0	32
	APR-JUN	148.0	107.0	72	166.0	112	48.0	32
BIG LOST nr Mackay 2	APR-SEP	195.0	136.0	70	215.0	110	58.0	30
LITTLE LOST bl Wet Ck	APR-SEP	38.8	29.0	75	45.0	116	13.0	34
	APR-JUL	31.4	24.0	76	37.0	118	11.0	35
LITTLE LOST nr Howe	APR-SEP	44.0	33.0	75	51.0	116	15.0	34
	APR-JUL	33.0	25.0	76	38.0	115	12.0	36

RESERVOIR STORAGE (1000AF)		WATERSHED SNOWPACK ANALYSIS						
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **	THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
MAGIC	191.5	10.1	108.5	89.0		Big Wood ab Magic	10	215 63
LITTLE WOOD	30.0	8.8	17.2	13.5		Camas Creek	5	460 43
CAREY VALLEY		NO REPORT				Big Wood Total	14	238 57
MACKAY	44.5	20.5	27.6	26.4		Little Wood River	4	888 62
						Fish Creek	0	0 0
						Big Lost River	4	304 67
						Little Lost River	4	233 74

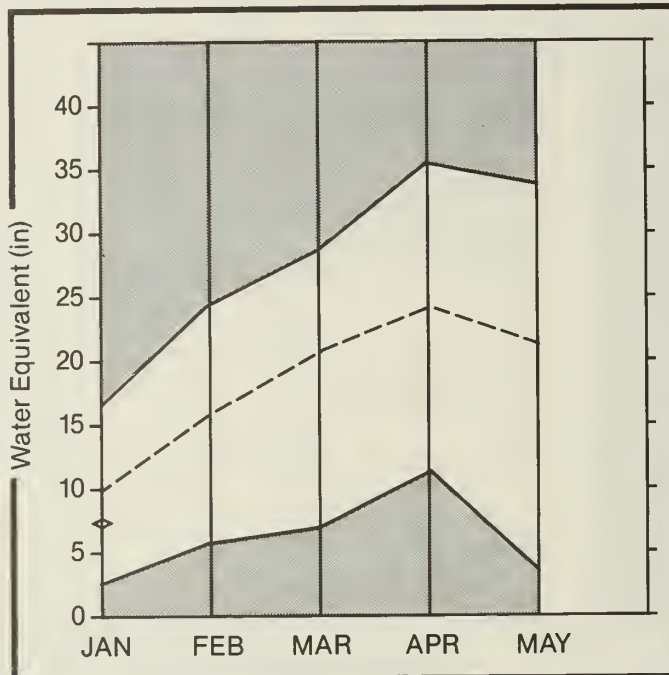
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The average is computed for the 1961-85 base period.

Willow Creek, Blackfoot, Upper Snake, and Portneuf River Basin

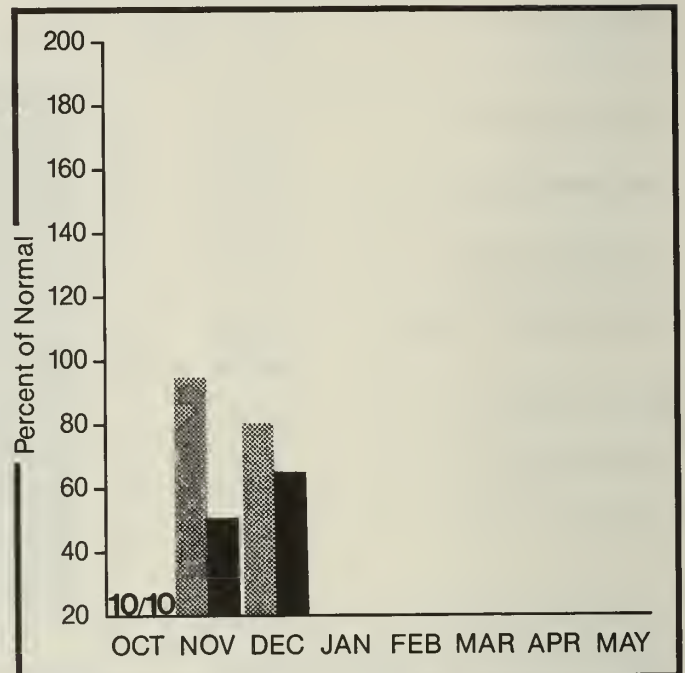
Mountain snowpack* (inches)



*Based on selected stations

Maximum Average
Minimum Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation Year to date precipitation

WATER SUPPLY OUTLOOK:

Snowpack conditions are generally below to well below normal throughout the basin. Snow measurements in the Upper Snake basin above Jackson, Wyoming report the highest snowpack conditions with 79% of normal. Several snow courses in the basin report near normal conditions. Elsewhere, snowpacks range from 52% of normal on the Salt River to 70% of the Henry's Fork. Apr-July seasonal volume streamflows are forecast to be lower than normal, ranging from 70% for the Portneuf near Topaz to 78% for the Teton above S. Leigh Creek. Reservoir carryover storages are generally near or slightly below normal, ranging from 82% of average in Grassy Lake to 106% in Island Park Reservoir. The exceptions to this are Palisades Reservoir which has 67% of normal storage and Jackson Lake which is at only 16%. The Jackson Lake storage level is currently restricted to low levels for construction purposes.

WILLOW CREEK, BLACKFOOT, UPPER SNAKE AND PORTNEUF RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
HENRY'S FORK nr Ashton 2	APR-SEP	746.0	560.0	75	665.0	89	455.0	61
	APR-JUL	557.0	420.0	75	500.0	90	340.0	61
HENRYS FORK nr Rexburg 2	APR-SEP	1595.0	1080.0	68	1480.0	93	680.0	43
	APR-JUL	1260.0	860.0	68	1180.0	94	545.0	43
FALLS RIVER nr Squirrel	APR-JUL	373.0	275.0	74	370.0	99	175.0	47
TETON RIVER ab S Leigh Ck	APR-SEP	194.0	151.0	78	190.0	98	112.0	58
	APR-JUL	145.0	113.0	78	142.0	98	84.0	58
TETON nr St. Anthony	APR-SEP	479.0	360.0	75	455.0	95	265.0	55
	APR-JUL	387.0	290.0	75	365.0	94	210.0	54
SNAKE at Moran 1	APR-SEP	888.0	650.0	73	870.0	98	430.0	48
PALISADES LAKE inflow 1	APR-SEP	3852.0	2890.0	75	4350.0	113	1430.0	37
SNAKE nr Heise 2	APR-SEP	4142.0	2980.0	72	4300.0	104	1660.0	40
	APR-JUL	3524.0	2550.0	72	3680.0	104	1420.0	40
SNAKE nr Blackfoot 2	APR-SEP	5680.0	4090.0	72	5910.0	104	2270.0	40
	APR-JUL	4589.0	3300.0	72	4770.0	104	1830.0	40
PORTNEUF at Topaz	MAR-SEP	109.0	77.0	71	121.0	111	33.0	30
	MAR-JUL	88.0	62.0	70	97.0	110	27.0	31

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
ISLAND PARK	127.6	93.9	107.4	88.9	Camas-Beaver Creeks	4	255	60
GRASSY LAKE	15.2	8.5	12.7	10.4	Henrys Fork River	9	149	73
JACKSON LAKE	624.4	83.4	84.6	525.6	Teton River	7	103	63
PALISADES	1200.0	682.5	1261.4	1013.1	Snake above Palisades	18	112	74
AMERICAN FALLS	1700.0	829.0	971.4	1002.4	Snake above Jackson Lake	9	136	80
BROWNLEE	975.3	738.9	895.0	825.8	Gros Ventre River	2	89	76
BLACKFOOT		NO REPORT			Greys River	3	87	66
HENRY'S LAKE	90.4	75.0	78.6	74.0	Salt River	1	113	52
RIRIE	96.5	45.4	---	45.4	Willow Creek	10	119	56
					Blackfoot River	3	110	59
					Portneuf River	3	112	59
					Toponce Creek	0	0	0

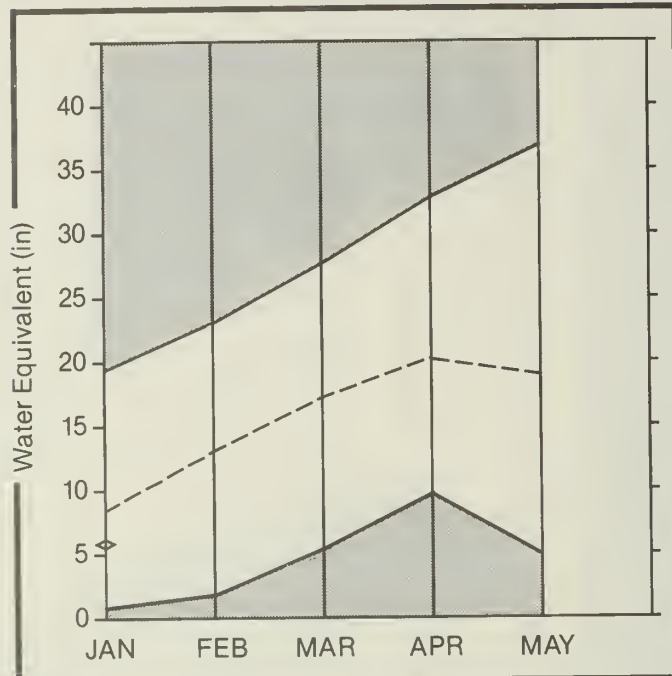
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Southside Snake River Basin

Mountain snowpack* (inches)



*Based on selected stations

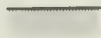
Maximum



Average



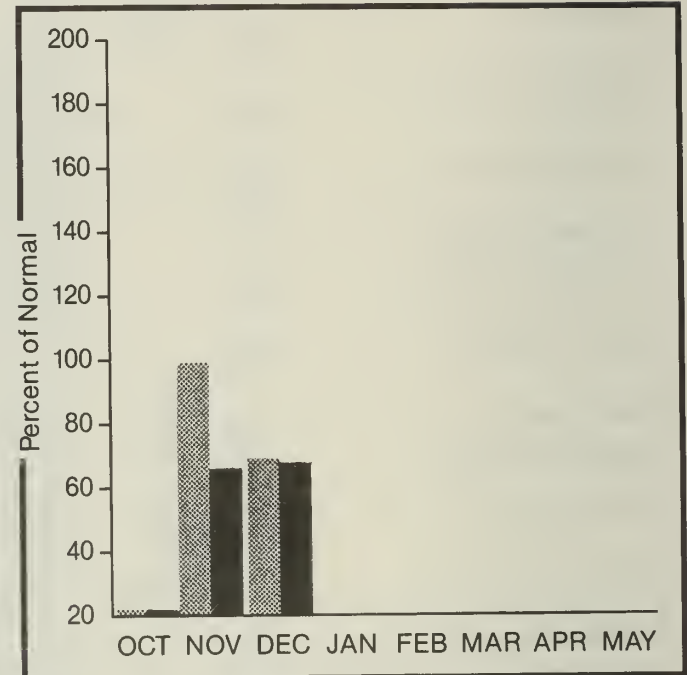
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

In general, January 1 snowpack conditions are below to well below normal over most of the basin. A few high elevation stations in the Jarbidge Range, however, report near normal conditions. Basin-wide snowpack conditions currently range from a low of 54% of normal in the Goose and Trapper Creek drainages above Oakley Reservoir to 85% of normal on the Bruneau River. Apr-July streamflows are forecast to be below normal, ranging from 50% for Lake Owyhee inflow to 83% for the Bruneau near Hot Spring. Reservoir carryover storage is below to well below normal. Oakley Reservoir has only 31% of normal storage and only 9% of capacity. Owyhee Reservoir stands at 42% of normal storage and only 23% of capacity. Soil moisture in the basin below normal due to the dry fall conditions.

SOUTHSIDE SNAKE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
OAKLEY RESERVOIR inflow	APR-SEP	33.0	23.0	70	36.0	109	10.0	30
	APR-JUL	29.7	21.0	71	33.0	111	9.0	30
SALMON FALLS CK nr San Jacinto	MAR-SEP	102.0	84.0	82	128.0	125	40.0	39
	MAR-JUL	97.0	80.0	82	122.0	126	38.0	39
	MAR-JUN	91.0	77.0	85	116.0	127	38.0	42
BRUNEAU nr Hot Spring	MAR-SEP	260.0	215.0	83	330.0	127	98.0	38
	MAR-JUL	248.0	205.0	83	315.0	127	93.0	38
OWYHEE RIVER nr Gold Creek 2	APR-JUL	27.8	18.6	67	39.0	140	3.0	11
OWYHEE RIVER nr Owyhee 2	APR-JUL	86.0	47.0	55	91.0	106	3.0	3
OWYHEE LAKE inflow 1	APR-SEP	455.0	225.0	49	616.0	135	50.0	11
	APR-JUL	427.0	214.0	50	580.0	136	43.0	10
OWYHEE at Rome 2	APR-JUL	376.0	188.0	50	385.0	102	38.0	10

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
OAKLEY	77.4	7.3	26.8	23.7	Raft River	2	157 62
SALMON FALLS	182.6	33.6	91.9	44.9	Goose-Trapper Creeks	2	164 54
OWYHEE	715.0	166.8	468.4	394.6	Salmon Falls Creek	9	243 79
					Bruneau River	8	216 85
					Owyhee River	12	199 87

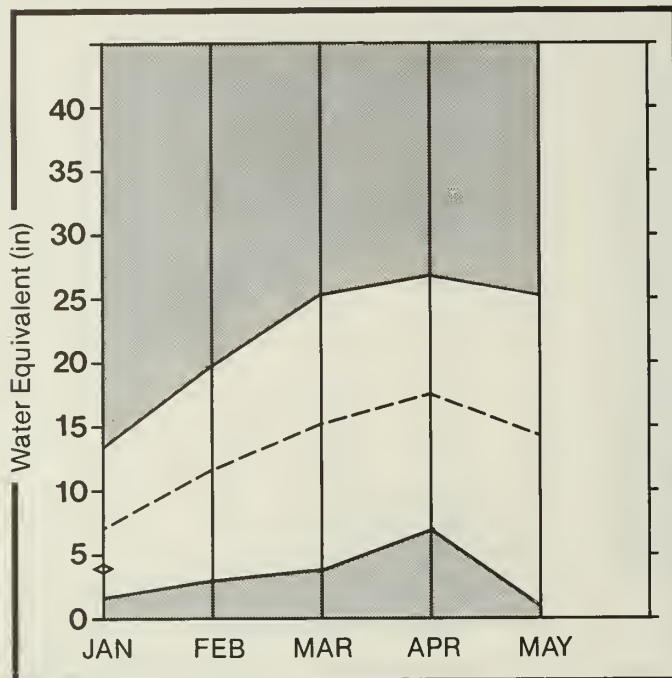
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Great Basin

Mountain snowpack* (inches)



*Based on selected stations

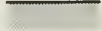
Maximum



Average



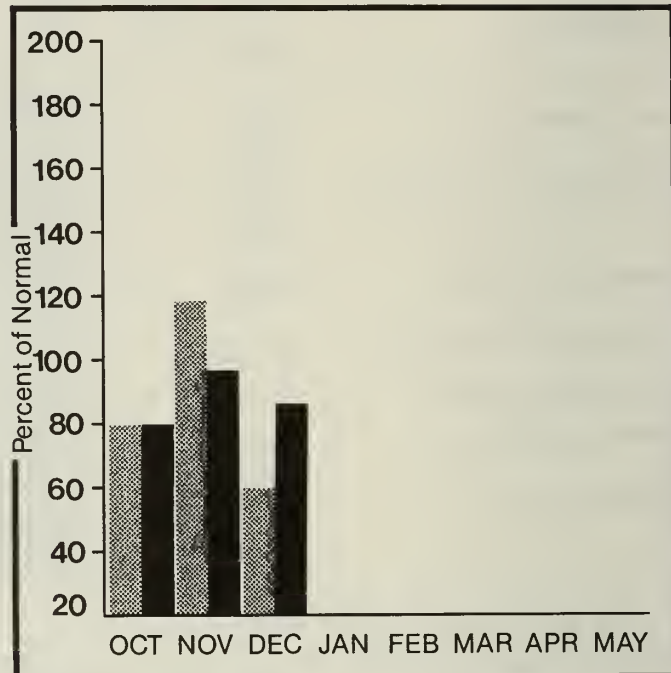
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Snowpack conditions for the Bear River and its tributaries are well below normal as of January 1. Basin snowpacks range from only 56 to 63% of average. Apr-July seasonal volume streamflows are currently forecast to be below normal ranging from 66% for the Bear at Harer to 77% for the Cub River near Preston. Carryover storage in Bear Lake is reported to be good at 101% of average for January 1.

For more information contact your local Soil Conservation Service office.

GREAT BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BEAR at Harer	APR-SEP	310.0	205.0	66	330.0	106	100.0	32
MONTPELIER CK nr Montpelier	APR-SEP	13.9	10.5	75	17.0	122	4.0	29
CUB RIVER nr Preston	APR-SEP	51.8	40.0	77	58.0	112	22.0	43
	APR-JUL	46.8	36.0	77	52.0	111	20.0	43

RESERVOIR STORAGE (1000AF)		WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **	THIS YEAR	LAST YEAR	AVERAGE
BEAR LAKE	1421.0	1001.0	1068.8	992.6	
MONTPELIER CREEK		NO REPORT			

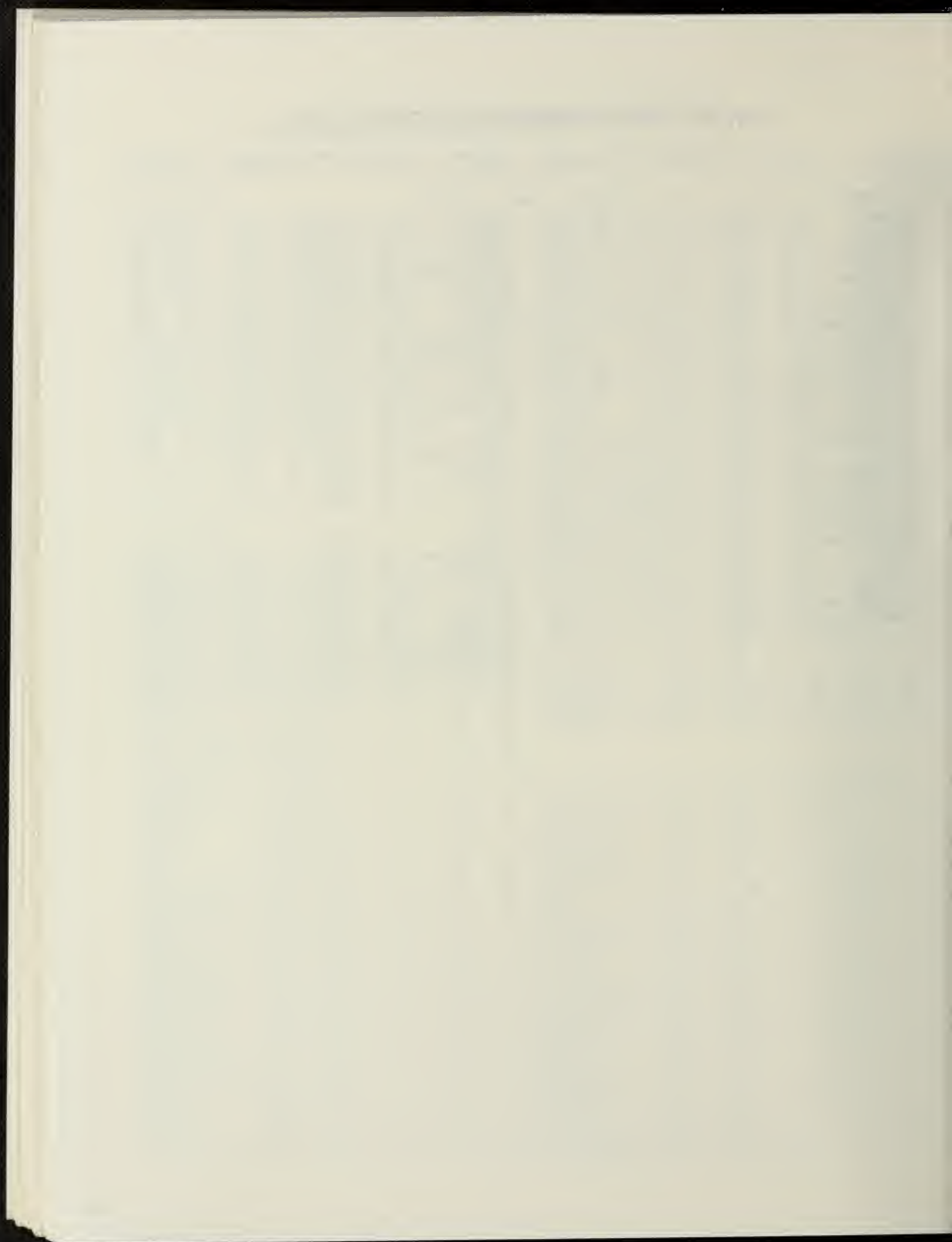
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 2 - Corrected for upstream diversions or changes in reservoir storage.
 The average is computed for the 1961-85 base period.

SNOW DATA MEASUREMENTS

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85														
UPPER COLUMBIA BASIN							WATERSHED I							WEISER, PAYETTE AND BOISE BASINS							WATERSHED III						
ABOVE BURKE	4100	1/04/68	14	3.2	8.0	8.4	ATLANTA SUMMIT	7600	1/01/88	43	9.8	5.9	15.5														
ABOVE ROLAND	4350	1/01/88	---	6.2E	11.0	12.9	ATLANTA SUM PILLDW	7580	1/01/88	---	9.5	6.1	13.3														
BEAR MOUNTAIN	5400	1/01/88	---	15.4	27.9	27.5	ATLANTA TOWNSITE	5370	1/01/88	13	2.0	2.5	---														
BEAR MTN PILLDW	5400	1/01/88	---	15.6	26.4	28.2	BANNER SUMMIT	7040	1/01/88	---	8.4E	6.6	14.4														
BENTON MEADOW	2370	12/29/87	7	1.0	1.2	3.0	BANNER SUMMIT PILLDW	7040	1/01/88	---	7.5	6.1	12.6														
BENTON SPRING	4920	12/29/87	15	5.1	6.4	8.6	BAO BEAR	4940	12/28/87	11	1.9	2.7	5.7														
BREEZY SADDLE	5010	12/28/87	29	7.1	10.9	12.2	BEAR BASIN	5350	1/01/88	---	2.0E	3.8	8.3														
CDPPER RIDGE	4820	1/01/88	---	5.3E	8.4	10.5	BEAR BASIN PILLDW	5350	1/01/88	---	1.6	3.5	8.1														
FORTY-NINE MEADOWS	4830	12/28/87	29	7.1	9.4	12.8	BEAR SADDLE	6180	12/28/87	24	5.6	3.8	12.4														
FOURTH OF JULY SUM	3200	1/04/88	12	3	0	3.7	BEAR SADDLE PILLDW	6180	1/01/88	---	6.8	4.1	12.6														
KELLOGG PEAK AM	5560	1/01/88	---	7.3E	11.8	14.4	BENNETT MOUNTAIN	6560	1/01/88	---	2.7E	2.0	8.2														
LOOKOUT	5140	1/04/88	28	7.4	13.6	14.5	BENNETT MTN PILLDW	6560	1/01/88	---	2.7	2.7	8.4														
LOOKOUT PILLDW	5140	1/01/88	---	7.1	13.6	14.6	BIG CREEK SUMMIT	6580	1/01/88	---	9.6E	9.5	15.4														
LOST LAKE	6110	12/28/87	41	11.1	20.2	25.2	BIG CREEK SUM PILLDW	6580	1/01/88	---	8.2	8.0	13.2														
LOST LAKE PILLDW	6110	1/01/88	---	12.7	---	29.5	BOGUS BASIN	6340	12/28/87	13	3.5	3.5	9.9														
LOWMEYER CREEK	3120	1/01/88	---	3.3E	6.1	7.6	BOGUS BASIN ROAD	5540	12/28/87	1	2E	0	3.1														
MOSQUITO RIDGE	5200	1/01/88	---	9.9E	12.5	17.1	BOULDER CREEK	5440	1/01/88	---	5.0E	3.9	10.0														
MOSQUITO PILLDW	5200	1/01/88	---	9.3	12.0	17.0	BRUNDAGE MOUNTAIN	7560	1/01/88	---	11.0E	11.5	20.8														
ROLAND SUMMIT	5120	1/01/88	---	8.5E	14.0	16.8	BRUNDAGE RESV PILLDW	4500	1/01/88	---	5.8	6.8	---														
SCHWEITZER BASIN	6090	12/31/87	55	17.6	18.4	22.7	CAMAS CREEK DIVIOE	5710	1/01/88	9	3.6	1.0	7.5														
SCHWEITZER BN PILLDW	6090	1/01/88	---	12.8	19.4	23.8	CHIMNEY CREEK	8400	1/01/88	17	3.3	0	8.0														
SCHWEITZER 60ML	4800	12/31/87	34	9.9	10.4	13.8	CDUCH SUMMIT	6840	1/01/88	23	4.4	1.0	8.0														
SCHWEITZER RIDGE	6200	12/31/87	48	15.7	17.9	21.3	COZY COVE	5380	1/01/88	20	3.5	2.1	7.2														
SHERWIN	3200	12/30/87	12	2.5	3.7	5.6	COZY COVE PILLDW	5380	1/01/88	---	4.0	2.4	10.7														
SHERWIN PILLDW	3200	1/01/88	---	2.2	3.1	5.5	CRAWFORD R.S.	4860	12/27/87	6	1.0	2.0	3.1														
SUNSET	5540	1/01/88	---	5.3E	12.1	14.7	OEADMAN GULCH	5600	12/25/87	15	3.2	3.8	7.7														
SUNSET PILLDW	5540	1/01/88	---	5.4	13.4	16.1	OEADMAN AIRSTRIP	5360	1/01/88	---	3.7E	2.4	7.0														
WATERSHED II							OEADWOOD AIRSTRIP	6660	1/01/88	49	12.4	8.1	21.2														
BANNER SUMMIT	7040	1/01/88	---	8.4E	6.6	14.4	OEADWOOD SUMMIT	6660	1/01/88	---	12.1	8.8	23.0														
BANNER SUMMIT PILLDW	7040	1/01/88	---	7.5	6.1	12.6	OEADWOOD SUM PILLDW	6660	1/01/88	---	6.5	3.4	11.5														
BEAR BASIN	5350	1/01/88	---	2.0E	3.8	8.3	DOLLARHIDE SUMMIT	8420	1/01/88	27	6.6	4.0	11.6														
BEAR BASIN PILLDW	5350	1/01/88	---	1.6	3.5	8.1	DOLLARHIDE SM PILLDW	8420	1/01/88	---	3.2	3.1	7.1														
BIG CREEK SUMMIT	6580	1/01/88	---	9.6E	9.5	15.4	GRAHAM GUARD STATION	5690	1/01/88	17	2.0	2.8	7.8														
BIG CREEK SUM PILLDW	6580	1/01/88	---	8.2	8.0	13.2	GRAHAM G.S. PILLDW	5690	1/01/88	---	1.1	0	2.7														
BOULDER CREEK	5440	1/01/88	---	5.0E	3.9	10.0	IOAHD CITY TOWNSITE	4000	12/28/87	6	7.6	5.8	14.6														
BREEZY SADDLE	5010	12/26/87	29	7.1	10.9	12.2	JACKSON PEAK	7070	1/01/88	33	6.9	7.0	12.9														
BRUNDAGE MOUNTAIN	7560	1/01/88	---	11.0E	11.5	20.8	JACKSON PEAK PILLDW	7070	1/01/88	---	1.5	3.8	7.1														
BRUNO CREEK	7920	1/04/88	26	6.0	5.6	9.1	LAKE FORK	5290	12/26/87	11	1.5	3.8	7.1														
CAYUSE AIRSTRIP	3500	12/28/87	15	2.8	3.7	5.5	LITTLE CAMAS FLAT	4940	1/03/88	4	5	0	3.2														
COOL CREEK	6250	12/28/87	39	10.5	15.0	24.0	MODRES CREEK SUMMIT	6100	12/28/87	27	7.1	6.1	13.9														
LUOL CREEK PILLDW	6250	1/01/88	---	10.4	14.8	22.4	MODRES CK SUM PILLDW	6100	1/01/88	---	7.4	5.5	14.4														
CRATER MEADOWS	5980	12/28/87	33	8.2	12.9	19.1	PAIRIE	4600	12/29/87	3	7	0	3.0														
CRATER MOWS PILLDW	5980	1/01/88	---	9.1	14.2	19.7	PAIRIE PILLDW	4600	1/01/88	---	7	0	---														
CROOKED FORK	3610	12/30/87	19	4.4	4.3	5.2	ROAD CREEK	5380	1/02/88	9	1.4	1.6	4.3														
OEADWOOD SUMMIT	6860	1/01/88	49	12.4	8.1	21.2	RDC FLAT SUMMIT	5310	12/26/87	14	2.0	4.0	7.6														
OEADWOOD SUM PILLDW	6860	1/01/88	---	12.1	8.8	23.0	SECESH SUMMIT	6520	12/26/87	34	8.3	8.2	15.5														
ELK BUTTE	5550	12/29/87	25	5.6	9.2	15.6	SECESH SUMMIT PILLDW	6520	1/01/88	---	8.1	6.6	15.6														
ELK BUTTE PILLDW	5550	1/01/88	---	6.9	11.3	17.6	SOLDIER R.S.	5740	1/01/88	16	2.9	0	5.5														
FISH LAKE AIRSTRIP	5650	12/28/87	38	10.2	11.7	17.3	SOLDIER R.S. PILLDW	4330	1/01/88	---	3.1	2	---														
FORTY-NINE MEADOWS	4830	12/28/87	29	7.1	9.4	12.8	SQUAW FLAT	6240	1/01/88	---	8.1E	5.0	9.9														
GALENA SUMMIT	8780	12/28/87	28	6.5	3.5	11.0	SQUAW FLAT PILLDW	6240	1/01/88	---	4.9	4.0	8.4														
GALENA SUMMIT PILLDW	8780	1/01/88	---	8.7	3.1	8.9	SQUAW MEADOW	5900	12/26/87	28	8.0	7.3	15.8														
GIBBONS PASS	7100	12/30/87	30	5.9	5.2	9.7	TRINITY MOUNTAIN	7770	1/02/88	48	12.4	5.1	19.6														
HEMLOCK BUTTE	5610	12/28/87	33	8.5	13.8	21.4	TRINITY MTN. PILLDW	7770	1/01/88	---	12.2	7.4	19.0														
HEMLOCK BUTTE PILLDW	5610	1/01/88	---	8.2	14.1	19.5	TRIPPO SUMMIT	5280	12/27/87	16	3.2	6.4	8.0														
HOODDO BASIN	6050	12/31/87	49	13.0	17.8	21.5	VIENNA MINE	8960	1/01/88	41	10.6	6.4	15.9														
HOODDO CREEK	5900	12/31/87	40	9.8	14.6	19.1	VIENNA MINE PILLDW	8960	1/01/88	---	10.0	6.0	15.9														
LEMMI PASS	7480	1/01/88	---	2.8E	---	4.1	WEST BRANCH	5580	12/31/87	23	3.9	4.1	11.2														
LEMMI RIDGE	8100	1/05/88	19	3.9	3.6	4.5	WEST BRANCH PILLDW	5580	1/01/88	---	5.3	5.3	11.0														
LOLO PASS	5240	12/30/87	26	6.6	8.8	11.9	BIG WOOD, LITTLE WOOD, BIG LOST AND LITTLE LOST BASINS							WATERSHED IV													
LOLO PASS PILLDW	5240	1/01/88	---	7.1	9.4	12.9	BEAR CANYON	7900	1/01/88	---	6.6E	.9	8.3														
LOST LAKE	6110	12/28/87	41	11.1	20.2	25.2	BEAR CANYON PILLDW	7900	1/01/88	---	5.5	.8	7.8														
LOST LAKE PILLDW	6110	1/01/88	---	12.7	---	29.5	BENNETT MOUNTAIN	6560	1/01/88	---	2.7E	2.0	8.2														
MEADOW LAKE	9150	1/01/88	---	5.2E	5.2	8.5	BENNETT MTN PILLDW	6560	1/01/88	---	2.7	2.7	8.4														
MEADOW LAKE PILLDW	9150	1/01/88	---	5.1	5.1	8.7	CAMAS CREEK DIVIOE	5710	1/01/88	9	3.6	1.0	---														
MILL CREEK SUMMIT	8800	1/01/88	---	6.3E	6.2	10.8	CHIMNEY CREEK	6400	1/01/88	17	3.3	0	7.5														
MILL CREEK ST PILLDW	8800	1/01/88	---	5.9	---	10.4	COPPER BASIN	7640	1/01/88	---	1.6E	.5	3.3														
MODNSHINE	7440	12/29/87	17	3.2	2.1	4.8	COUCH SUMMIT	6840	1/01/88	23	4.4	1.0	8.0														
MODNSHINE PILLDW	7440	1/01/88	---	3.8	3.3	4.6	COLLARHIDE SUMMIT	8420	1/01/88	27	6.5	3.4	11.5														
MOOSE CREEK	6200	12/30/87	23	4.4	4.4	7.4	DOLLARHIDE SM PILLDW	8420	1/01/88	---	6.6	4.0	11.6														
MOOSE CR PILLDW	6200	1/01/88	---	4.7	4.1	7.6	GALENA	7440	1/01/88	---	4.8E	2.5	8.4														
MORGAN CREEK	7600	1/01/88	---	4.2E	3.8	6.2	GALENA PILLDW	7440	1/01/88	---	6.0	3.2	8.3														
MORGAN CREEK PILLDW	7600	1/01/88	---	4.1	3.6	5.8	GALENA NEW	7470	12/28/87	24	5.2	2.2	8.8														
MOUNTAIN MEADOWS	6360	1/01/88	---	4.8E	6.2	11.0	GALENA SUMMIT	8780	12/28/87	26	6.5	3.5	11.0														
MOUNTAIN MOWS PILLDW	6360	1/01/88	---	5.6	7.9	12.6	GALENA SUMMIT PILLDW	8780	1/01/88	---	6.7	3.1	8.9														
NEZ PERCE PASS	6570	12/30/87	21	4.1	4.0	7.1	GARFIELD R.S.	6560	12/30/87	11	1.9	0	4.5														
PIERCE R.S.	3080	12/3																									

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
WILLOW, SLACKFOOT, UPPER SNAKE AND PORTNEUF BASINS							SOUTH-FIDE SNAKE BASIN						
WATERSHEO V							WATERSHEO VI						
ASPEN GROVE	6500	1/01/88	---	3.0E	2.1	--	ANTELOPE RIDGE	6180	12/27/87	---	1.0E		--
BIG SPRINGS	6400	12/30/87	26	4.9	3.9	8.3	BAODER GULCH	6660	1/02/88	15	2.4	1.6	4.8
BIRCH CREEK	6800	12/29/87	10	2.3	2.4	4.0	BEAR CREEK	7800	1/01/88	---	6.5E	2.3	8.9
BLACK BEAR	7950	12/30/87	53	13.4	8.4	17.6	BIG BEND	6700	1/04/88	16	2.8	.9	3.9
BLUE LEDGE MINE	6900	12/31/87	25	5.9	1.9	8.1	BOSTETTER R.S.	7500	1/02/88	29	5.3	3.1	9.4
BLUE RIDGE	6780	12/29/87	17	4.1	3.6	7.3	BOSTETTER RS. PILLOW	7500	1/01/88	---	7.3	2.6	7.6
BONE	6200	12/29/87	9	1.5	.0	2.8	CLEAR CREEK MEADOWS	9420	1/01/88	---	6.1E	3.8	9.5
BROCKMAN STATION	6430	12/29/87	14	2.7	2.5	4.2	COLUMBIA BASIN AM	6650	12/29/87	29	5.2	.0	.4
CAMP CREEK	6580	12/29/87	12	2.0	1.2	4.4	DEADLINE	7400	1/02/88	27	5.8	2.5	9.4
COULTER CREEK	7020	1/01/88	---	6.5E	5.8	9.7	DEADLINE SOUTH	7450	1/02/88	32	6.0	2.9	10.7
COULTER CREEK PILLOW	7020	1/01/88	---	6.4	4.5	10.5	GDAT CREEK	8800	1/01/88	---	6.9E	3.3	7.4
CRAB CREEK	6860	12/31/87	22	4.5	1.2	7.5	GULO CREEK	6600	1/04/88	12	1.9	.6	2.5
CRAB CREEK PILLOW	6860	1/01/88	---	4.8	1.1	7.9	HOWELL CANYON	7980	1/05/88	30	6.9	4.5	11.6
FALL CREEK	6820	12/29/87	8	1.2	1.8	3.9	HOWELL CANYON PILLOW	7980	1/01/88	---	4.9	3.5	9.5
FREOS MOUNTAIN	8000	1/01/88	---	8.7E	--	10.4	HUMMINGBIRD SPRINGS	8950	1/01/88	---	11.2E	4.4	10.3
GRASSY LAKE	7270	1/04/88	48	11.6	8.8	15.1	JACK CREEK, LOWER	6800	1/07/88	17	3.0	.8	1.1
GRASSY LAKE PILLOW	7270	1/01/88	---	10.3	9.3	15.8	JACKS PEAK	8420	1/01/88	---	6.5E	4.4	9.2
INDIAN MEADOWS	9420	12/29/87	45	12.8	8.9	15.4	LANGFORD FLAT CREEK	5980	1/02/88	17	2.2	.0	2.6
ISLAND PARK	6290	12/30/87	23	4.7	3.0	6.8	LAUREL DRAW	6700	1/01/88	---	3.2E	3.3	3.7
ISLAND PARK PILLOW	6290	1/01/88	---	5.1	1.9	6.6	MAGIC MOUNTAIN	6880	1/02/88	27	4.9	2.7	8.2
JACKPINE CREEK	7350	12/29/87	27	6.8	4.6	--	MAGIC MTN PILLOW	6880	1/01/88	---	5.3	3.0	8.2
KILGORE	6320	12/31/87	18	2.4	1.5	4.7	MERRIT MOUNTAIN AM	7000	12/29/87	24	4.3	.0	--
LAVA CREEK	7350	12/29/87	19	3.4	3.1	6.5	MUD FLAT	5730	12/27/87	5	.8	1.5	3.1
LOWER PEGGLE	5780	1/01/88	---	3.4E	2.7	5.3	MUD FLAT PILLOW	5730	1/01/88	---	1.6	.0	2.3
MAJISON PLATEAU	7750	12/30/87	34	7.5	5.0	9.3	POLE CREEK R.S.	8330	1/01/88	---	8.9E	4.2	8.6
MC RENOLDS RESERVOIR	6720	12/29/87	21	4.3	3.2	8.0	SEVENTYSIX CREEK	7100	1/01/88	---	4.6E	3.0	6.3
MINK CREEK	6410	1/01/88	---	4.6E	4.5	8.5	SEVENTYSIX CK SNOTEL	7100	1/01/88	---	2.5	--	6.1
MUD CREEK	7100	12/29/87	21	4.9	5.1	7.9	SHOSHONE BASIN	5810	1/01/88	---	2.3E	.2	3.0
PACKSADDLE SPRING	8200	12/29/87	28	7.2	6.0	12.4	SOUTH MOUNTAIN	6500	12/27/87	15	3.1	3.0	6.3
PINE CREEK PASS	6810	12/30/87	23	3.1	3.8	7.2	SOUTH MTN PILLOW	6500	1/01/88	---	3.8	2.2	5.5
SAWTELL MOUNTAIN	8720	12/30/87	44	11.5	6.9	14.6	TAYLOR CANYON	6200	1/06/88	14	2.3E	.5	2.5
SHEEP MOUNTAIN	6570	12/29/87	16	3.0	1.8	4.9	TOE JAM AM	7700	12/29/87	24	4.3	--	4.6
SHEEP MTN PILLOW	6570	1/01/88	---	3.6	2.5	5.8	GREAT BASIN						
SLUG CREEK DIVIDE	7230	1/01/88	---	4.0E	3.8	6.9	CUB RIVER R.S.	5450	12/26/87	16	2.3	.7	4.1
SLUG CK DVD PILLOW	7230	1/01/88	---	4.3	4.0	8.0	EMIGRANT SUMMIT	7390	1/04/88	36	6.9	4.8	10.2
SOMSEN RANCH	6640	1/01/88	---	3.9E	3.5	6.3	EMIGRANT SUM PILLOW	7390	1/01/88	---	6.6	3.6	11.3
SOMSEN RANCH PILLOW	6800	1/01/88	---	3.7	3.8	5.1	FRANKLIN BASIN	8020	12/26/87	28	5.4	4.8	10.2
STATE LINE	6660	12/30/87	21	3.3	5.5	6.2	FRANKLIN 85N PILLOW	8040	12/26/87	---	6.5	5.9	11.4
TARGHEE PASS	6980	1/01/88	---	2.7E	--	6.2	GIVEOUT	6860	1/01/88	---	3.0E	1.4	5.2
TEX CREEK	6650	1/01/88	---	2.8E	1.3	5.0	GIVEOUT PILLOW	6860	1/01/88	---	3.1	1.1	5.0
VALLEY VIEW	6680	12/30/87	16	2.9	2.3	6.4	GIVEOUT NEW	6930	1/01/88	---	2.7E	1.2	4.4
WHISKEY CREEK	6800	12/30/87	30	5.1	4.3	7.7	LIBERTY SPRING	8600	1/01/88	---	6.6E	4.2	15.6
WHITE ELEPHANT	7710	12/30/87	36	8.2	4.1	10.1	LITTLE BEAVER	6790	1/01/88	---	3.7E	1.7	6.1
WHITE ELEPHANT PILL	7710	1/01/88	---	8.6	5.1	11.2	LOWER HOME CANYON	7640	1/01/88	---	3.4E	3.3	5.7
WILDHORSE DIVIDOE	6490	1/01/88	---	4.7E	4.1	7.8	MONTPELIER CREEK	6540	1/01/88	---	2.0E	.9	3.5
WILDHORSE DVD PILLOW	6490	1/01/88	---	4.1	3.4	6.6	OXFORD MOUNTAIN	6800	1/01/88	---	3.1E	.0	--
							OXFORD SPRING PILLOW	6740	1/01/88	---	3.2	.0	4.3
							STRAWBERRY-MINK DVD	6720	1/01/88	---	5.2E	4.4	9.4
							UPPER HOME CANYON	8560	1/01/88	---	5.4E	5.3	9.2
							WILLOW FLAT	6070	12/26/87	23	4.2	2.1	6.9



The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State	Idaho Department of Water Resources Soil and Water Conservation Districts of Idaho
Federal	U.S. Department of Agriculture Forest Service U.S. Department of Army Corps of Engineers U.S. Department of Commerce NOAA, National Weather Service U.S. Department of Interior Bureau of Reclamation Geological Survey, Water Resources Division Shoshone-Bannock Tribal Council
Local	Big Lost River Irrigation District Big Wood Irrigation Company Boise Project Board of Control Idaho Water District #01 Lewiston Orchards Irrigation District Little Wood River Irrigation District North Board of Control — Owyhee Project Salmon Falls Irrigation Company South Board of Control — Owyhee Project
Private	Cyprus Mining Company FMC Corporation Idaho Power Company Le Bois Resort Washington Water Power Company

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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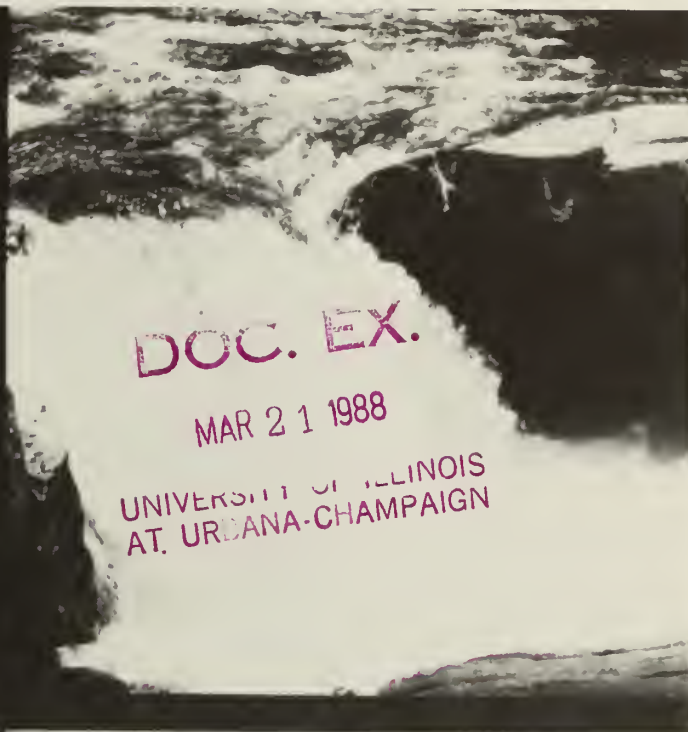
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Boise,
Idaho



Idaho Water Supply Outlook

February 1, 1988



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UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN



Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are terms reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola, Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Denver, CO 80211
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 87102-3157
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97204
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201-1080
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209.

Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Idaho Water Supply Outlook

and

Federal — State — Private Cooperative Snow Surveys

Issued by

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"Programs and assistance of the United States Department of Agriculture are available without regard to race, creed, color, sex, age, or national origin."

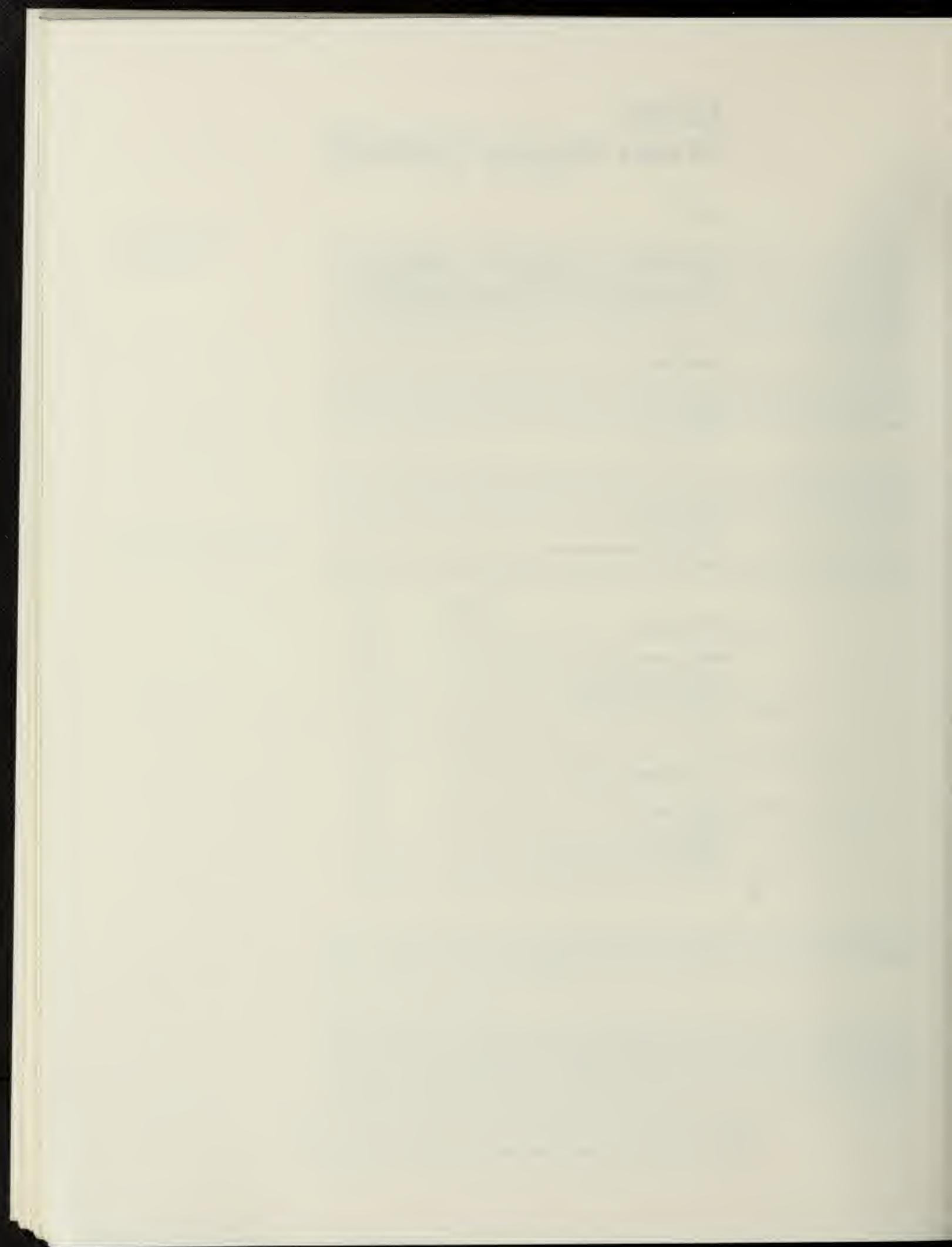
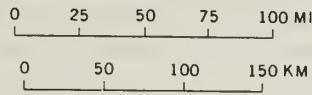


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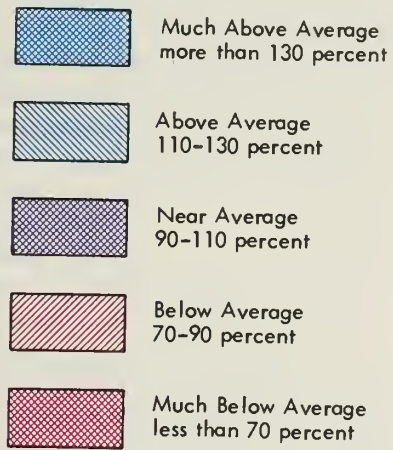
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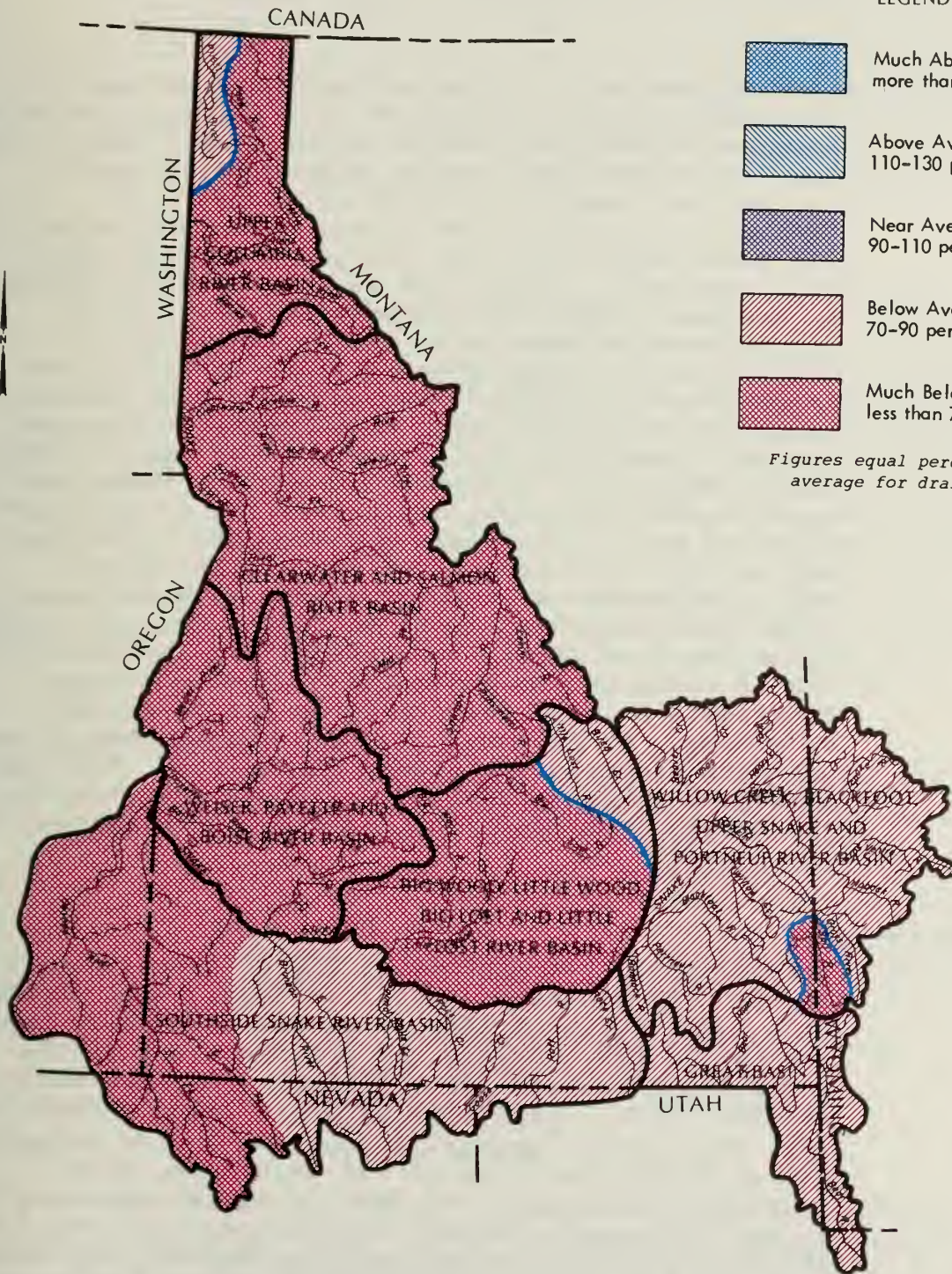
STREAMFLOW PROSPECTS IDAHO



LEGEND



Figures equal percent of
average for drainage.



GENERAL OUTLOOK

SUMMARY:

MOTHER NATURE HAS DEPRIVED IDAHO OF NORMAL PRECIPITATION FOR YET ANOTHER MONTH, AND AS A RESULT MOST STREAMFLOW FORECASTS HAVE BEEN REDUCED FROM THOSE REPORTED A MONTH AGO. SNOW ACCUMULATION DURING JANUARY WAS 60-80% OF NORMAL ACROSS THE STATE, AND MOST STREAMS ARE NOW FORECAST TO YIELD ONLY 60 TO 70% OF NORMAL RUNOFF THIS SPRING AND SUMMER. EXTREMELY HEAVY PRECIPITATION WILL BE NEEDED IN THE COMING MONTHS TO SIGNIFICANTLY IMPROVE THIS OUTLOOK.

SNOWPACK:

Although February 1 snow surveys show an overall increase in Idaho's snowpack from the previous month, snowpack conditions remain below to well below normal throughout the state. Snow accumulation during January was generally 60-80% of normal. In comparison to normal, most watersheds show a 10 to 20% improvement over the January 1 surveys, but snowpacks still range from only 52 to 84% of normal. In northern Idaho, from the Salmon River north, snowpack conditions range from a low of 52% of average on the Coeur d'Alene basin to 72% on the Priest River drainage. The central Idaho mountain snowpacks generally range from 60-66% of average, except in the Little Lost basin which reports 84% of normal snowpack. Snowpacks in eastern Idaho and the Upper Snake in Wyoming range from 62% on the Salt River to 80% on the Snake above Jackson, with most basins reporting between 66 and 78% of normal. Basins on the south side of the Snake River report conditions ranging from 69 to 78% of average, except on the Bruneau where the snowpack is reported to be 84% of normal. The Great Basin area in extreme southeastern Idaho reports 63 to 76% of normal snowpacks. By February 1, approximately 60% of the snowpack accumulation season has passed. Much above average precipitation will be needed over the next two months if snowpack conditions are to improve to near normal.

PRECIPITATION:

Precipitation averaged about 75% of normal across the state. The southeast corner of Idaho fared the best with Idaho Falls at 104% of normal, Pocatello 94%, and Ashton 92%. Salmon, on the other end of the scale recorded just 35% of normal. By geographic regions within the state, northern Idaho showed near 65%, the central mountains reported a wide range from 80% at McCall to a low of 35% at Salmon, and southeast Idaho was near 90%. Temperatures were near to a little above normal over the northern third of the state, while the southern two-thirds were below normal. Boise had a departure of minus 3.8 degrees fahrenheit, with Twin Falls and Pocatello at minus 2.5 degrees.

RESERVOIRS:

In general, reservoir carryover storage remains below normal in most reservoirs throughout the state. The combined storage in 23 key reservoirs across Idaho is 81% of average and 54% of capacity. The best carryover storage is found in the Upper Snake basin where most reservoirs report 96-103% of average with the exception of Palisades Reservoir which contains 75% of normal storage. The lowest carryover storage volumes are found in southcentral and southwestern Idaho, where storages generally range from a low of 17% of average in Magic Reservoir to 73% in Salmon Falls Reservoir. The exceptions are Cascade and Deadwood Reservoirs which report 89 and 81% of normal storage, respectively. Storage levels in northern Idaho reservoirs vary widely, ranging from only 39% of normal in Coeur d'Alene Lake to 106% in Priest Lake.

STREAMFLOW:

Most streamflow forecasts have been lowered from those reported a month ago due to below normal precipitation received during January. April-July volume forecasts range from 57% of average for the Weiser River to 80% for the Little Lost River near Howe. The best outlook is across the southern edge of Idaho (from the Bruneau basin eastward) through the Upper Snake drainage, where forecasts are typically in the mid-seventy percent of normal range. This contrasts with north central Idaho, where forecasts are in the low sixties. With only two months remaining in the snow accumulation season, it is doubtful that Idaho's snowpack will improve enough to significantly upgrade these forecasts.

RECREATIONAL OUTLOOK:

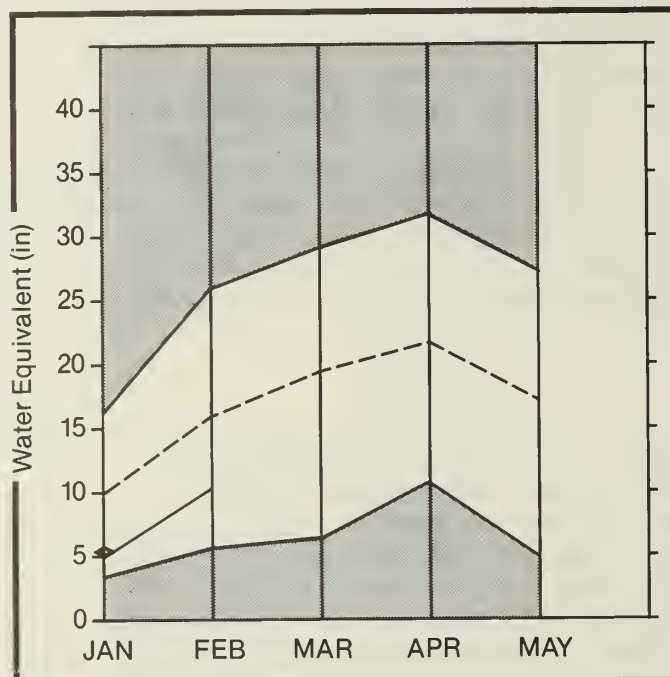
February 1 snowpack levels and streamflow forecasts indicate that a below normal runoff can be expected. The timing and level of runoff in Idaho's rivers will largely depend on precipitation during the remainder of the snow accumulation season and temperatures during the spring. River runners may want to consider the positive attributes of below normal streamflows in their trip planning this year:

- earlier than normal rafting season
- warmer water for swimming
- bigger beaches for camping
- better fishing
- scenic beauty of spring

The Idaho Outfitters and Guides Association reports that Idaho's major whitewater rafting rivers should not be adversely affected by below normal streamflow forecasts.

Upper Columbia Basin

Mountain snowpack* (inches)



*Based on selected stations

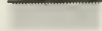
Maximum



Average



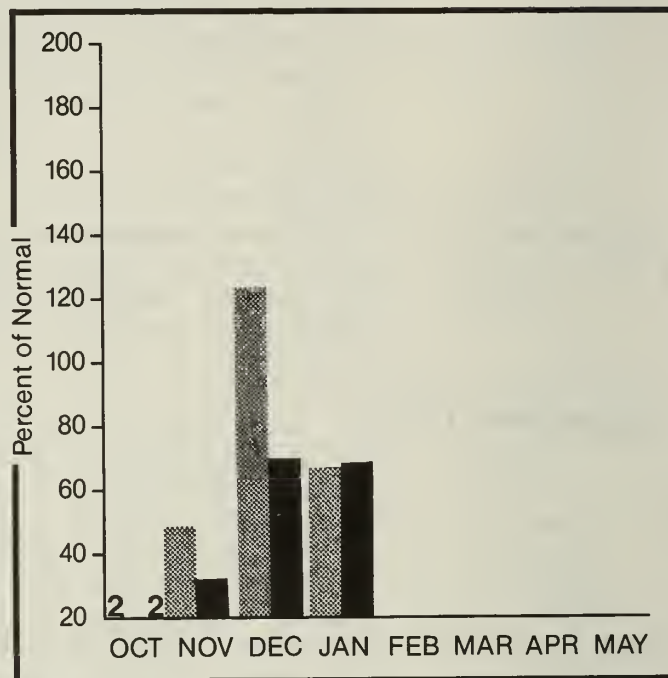
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Snowpack conditions in this basin show little or no improvement from those reported near January 1. February 1 snowpacks remain well below normal, ranging from 52-61% of average on all basins except the Priest River drainage, which reports 72% of average conditions. Apr-July streamflow forecasts decreased from last month, ranging from 60 to 72% of normal. Reservoir carryover storage is also well below normal on Coeur d'Alene and Pend Oreille Lakes at 39 and 64% of normal, respectively. Priest Lake reports slightly above normal storage at 106% of average.

For more information contact your local Soil Conservation Service office.

UPPER COLUMBIA RIVER BASIN

STREAMFLOW FORECASTS

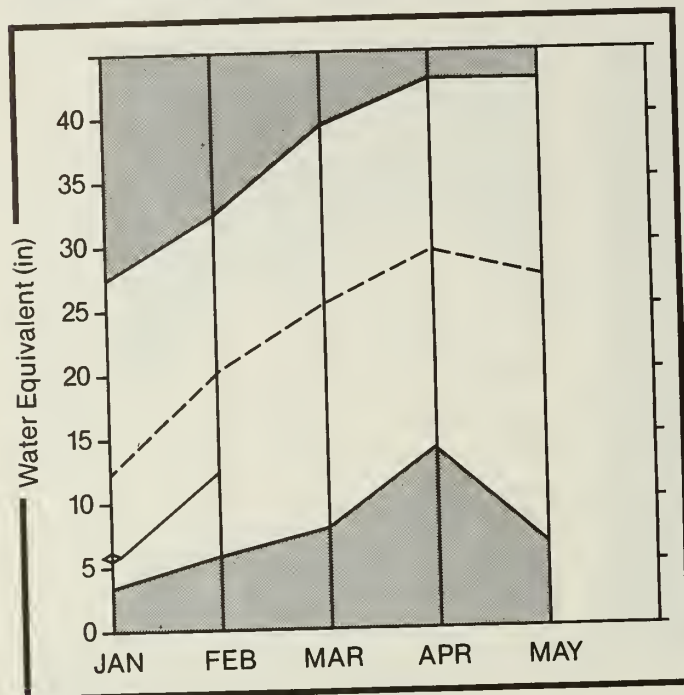
FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
KOOTENAI at Leonia 2	APR-SEP	8441.0	6040.0	72	7900.0	94	4100.0	49
	APR-JUL	7340.0	5250.0	72	6870.0	94	3600.0	49
	APR-JUN	5899.0	4250.0	72	5550.0	94	2900.0	49
CLARK FORK at White Horse Rapids 2	APR-SEP	13370.0	9010.0	67	12800.0	96	5270.0	39
	APR-JUL	12150.0	8180.0	67	11700.0	96	4780.0	39
	APR-JUN	10360.0	6940.0	67	9900.0	96	4040.0	39
PEND OREILLE LAKE inflow 2	APR-SEP	14930.0	9920.0	66	14100.0	94	5740.0	38
	APR-JUL	13650.0	9070.0	66	12800.0	94	5250.0	38
	APR-JUN	11780.0	7770.0	66	11100.0	94	4470.0	38
PRIEST RIVER at Priest 2	APR-SEP	893.0	640.0	72	930.0	104	345.0	39
	APR-JUL	838.0	600.0	72	870.0	104	325.0	39
SPOKANE at Post Falls 2	APR-SEP	2820.0	1750.0	62	3100.0	110	560.0	20
	APR-JUL	2723.0	1720.0	63	3000.0	110	540.0	20
ST. JOE at Calder	APR-SEP	1281.0	805.0	63	1170.0	91	450.0	35
	APR-JUL	1211.0	760.0	63	1100.0	91	420.0	35
COEUR D' ALENE at Enaville	APR-SEP	830.0	500.0	60	900.0	108	110.0	13
	APR-JUL	789.0	475.0	60	850.0	108	105.0	13

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE THIS YEAR	LAST YEAR	** AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
HUNGRY HORSE	3451.0	1887.0	2402.0	2406.0	Kootenai ab Bonners Ferry	44	72 59
FLATHEAD LAKE	1791.0	840.2	840.2	1133.0	Pend Oreille River	122	84 61
PEND OREILLE	1155.0	529.9	212.7	823.1	Clark Fork River	81	92 63
NOXON RAPIDS	335.0	324.7	295.8	314.2	Priest River	5	100 72
COEUR D'ALENE	222.8	80.2	88.2	205.4	Rathdrum Creek	0	0 0
PRIEST LAKE	97.7	34.8	29.8	32.9	Hayden Lake	0	0 0
					Coeur d'Alene River	8	74 52
					St. Joe River	7	86 61
					Spokane River	15	81 57
					Palouse River	0	0 0

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
 2 - Corrected for upstream diversions or changes in reservoir storage.
 The average is computed for the 1961-85 base period.

Clearwater and Salmon River Basin

Mountain snowpack* (inches)



*Based on selected stations

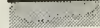
Maximum



Average



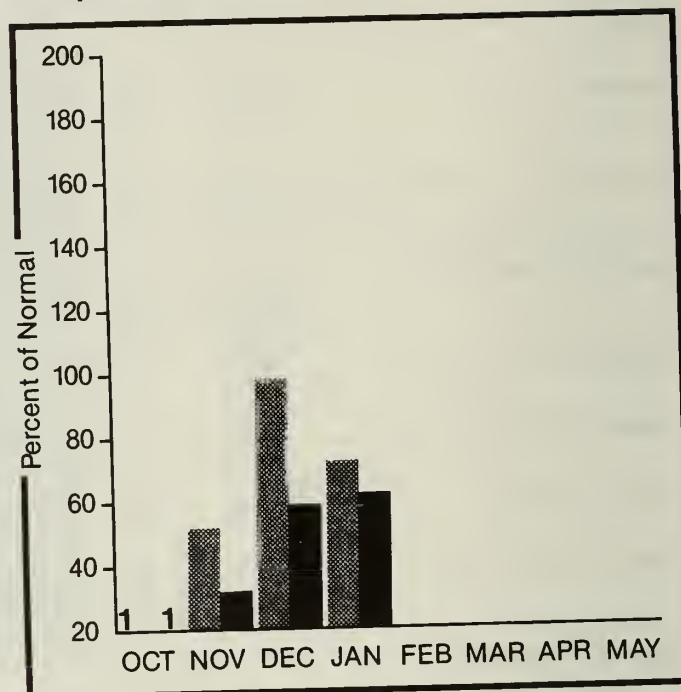
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Although February 1 snow surveys show a general improvement in the snowpack conditions over those reported a month ago, snowpacks remain well below normal throughout the basin. Snowpacks currently range from 52% of average on the Lemhi River drainage to 72% on the Lochsa River, with most basins reporting 59-64% of normal snowpack. Apr-July seasonal volume streamflows are forecast to be well below normal, ranging from 60% of average on the N. Fk. Clearwater to 66% on the Salmon nr Salmon. Dworshak Reservoir reports 84% of normal storage for February 1. Soil moisture conditions remain below normal as a result of the dry summer and fall. Well above normal snowfall will be needed for the remainder of the snow accumulation period to significantly improve the summer water supply outlook.

CLEARWATER AND SALMON RIVER BASIN

STREAMFLOW FORECASTS

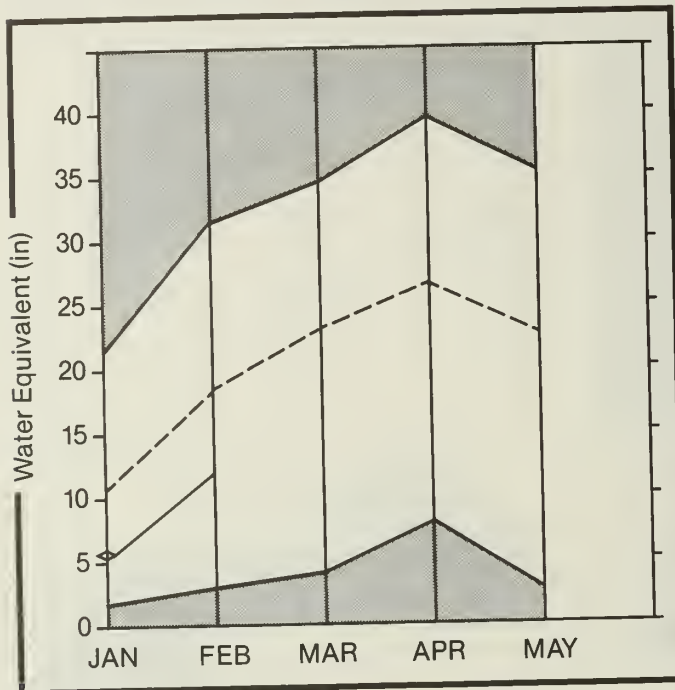
FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
CLEARWATER at Orofino	APR-SEP	5163.0	3200.0	62	5060.0	98	1340.0	26
	APR-JUL	4889.0	3040.0	62	4800.0	98	1280.0	26
CLEARWATER at Spalding	APR-SEP	8378.0	5200.0	62	8380.0	100	2090.0	25
	APR-JUL	7916.0	4920.0	62	7930.0	100	1980.0	25
DWORSHAK RESERVOIR inflow	APR-SEP	3010.0	1810.0	60	3010.0	100	750.0	25
	APR-JUL	2822.0	1680.0	60	2820.0	100	705.0	25
SALMON at Whitebird	APR-SEP	7007.0	4550.0	65	7000.0	100	2310.0	33
	APR-JUL	6322.0	4120.0	65	6210.0	98	2090.0	33
SALMON at Salmon	APR-SEP	1077.0	710.0	66	1150.0	107	270.0	25
	APR-JUL	919.0	610.0	66	980.0	107	240.0	26

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE THIS YEAR	LAST YEAR	** AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
DWORSHAK	3467.8	1854.8	2424.7	2198.2	North Fork Clearwater	13	91 59
					Lochsa River	4	102 72
					Selway River	2	106 68
					Clearwater River	16	94 62
					Salmon River ab Salmon	7	131 66
					Lemhi River	1	93 52
					Salmon River Total	20	122 65

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
 2 - Corrected for upstream diversions or changes in reservoir storage.
 The average is computed for the 1961-85 base period.

Weiser, Payette, and Boise River Basin

Mountain snowpack* (inches)



*Based on selected stations

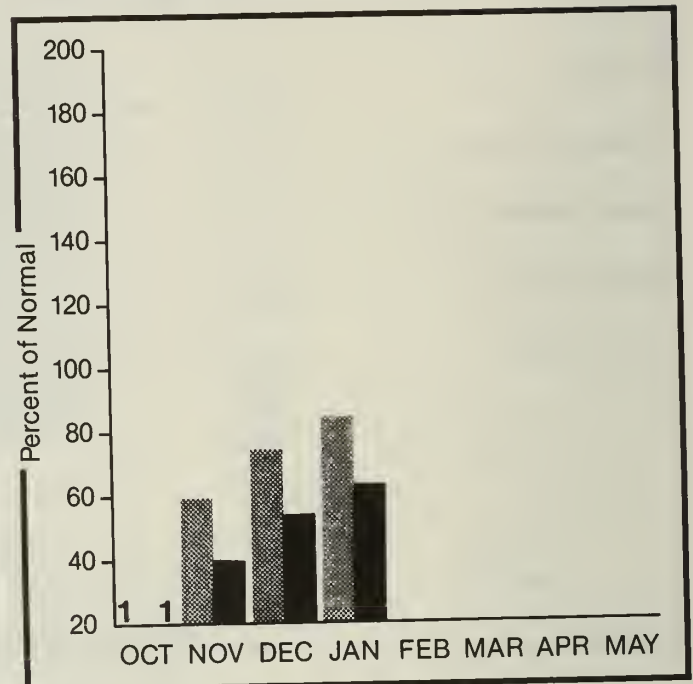
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

In comparison to normal, the February 1 surveys show a 10 to 20% improvement in the snowpack conditions from those reported last month. For the water year, however, snowpacks remain below normal, ranging from 63 to 66% of average. Apr-July streamflow forecasts now range from 57 to 70%. Reservoir carryover storage is also below normal ranging from 42 to 69% on the Boise system reservoirs, 81% in Deadwood Reservoir, and 89% in Cascade Reservoir. The Boise storage system is not expected to fill to capacity unless above normal precipitation occurs over the next few months. Water supplies, however, should be minimally adequate to meet irrigation needs on the Boise and Payette basins assuming near normal precipitation from this date on. Water supplies on the Weiser basin are expected to be in very short supply even if normal precipitation is received.

WEISER, PAYETTE AND BOISE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MDST PROBABLE (1000AF)	MDST PRDBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
WEISER nr Weiser	APR-SEP	444.0	255.0	57	510.0	115	44.0	10
	APR-JUL	414.0	235.0	57	470.0	114	41.0	10
PAYETTE RIVER at Horseshoe Bend	APR-SEP	1862.0	1270.0	68	1820.0	98	710.0	38
	APR-JUL	1717.0	1170.0	68	1680.0	98	650.0	38
NF PAYETTE RIVER at Cascade 2	APR-SEP	568.0	385.0	68	550.0	97	220.0	39
	APR-JUL	531.0	360.0	68	515.0	97	205.0	39
NF PAYETTE RIVER nr Banks 2	APR-SEP	737.0	510.0	69	695.0	94	325.0	44
	APR-JUL	691.0	480.0	69	655.0	95	310.0	45
SF PAYETTE RIVER at Lowman	APR-SEP	516.0	360.0	70	490.0	95	230.0	45
	APR-JUL	458.0	320.0	70	435.0	95	205.0	45
DEADWOOD RESERVOIR inflow	APR-JUL	143.0	100.0	70	138.0	97	62.0	43
BOISE RIVER nr Twin Springs 1	APR-SEP	722.0	485.0	67	660.0	91	300.0	42
	APR-JUL	664.0	445.0	67	605.0	91	280.0	42
SF BOISE at Anderson Dam 1	APR-SEP	619.0	400.0	65	530.0	86	270.0	44
	APR-JUL	578.0	375.0	65	495.0	86	255.0	44
BOISE RIVER nr Boise 1	APR-SEP	1628.0	1095.0	67	1630.0	100	555.0	34
	APR-JUL	1508.0	1010.0	67	1510.0	100	510.0	34
	APR-JUN	1334.0	890.0	67	1330.0	100	455.0	34

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
MANN CREEK	11.3	1.6	3.2	5.4	Mann Creek	1	119	58
CASCADE	703.2	362.7	465.4	409.4	Weiser River	4	123	63
DEADWOOD	162.0	64.6	88.0	79.5	North Fork Payette	9	112	66
ANDERSON RANCH	464.2	125.3	369.1	300.6	South Fork Payette	7	143	66
ARROWROCK	286.6	146.3	239.3	223.9	Payette River Total	15	122	65
LUCKY PEAK	307.0	81.0	56.7	117.4	Middle & North Fork Boise	9	144	65
LAKE LOWELL (DEER FLAT)	177.0	87.8	129.1	131.0	South Fork Boise River	8	157	63
					Boise River Total	17	155	66
					Canyon Creek	1	132	61

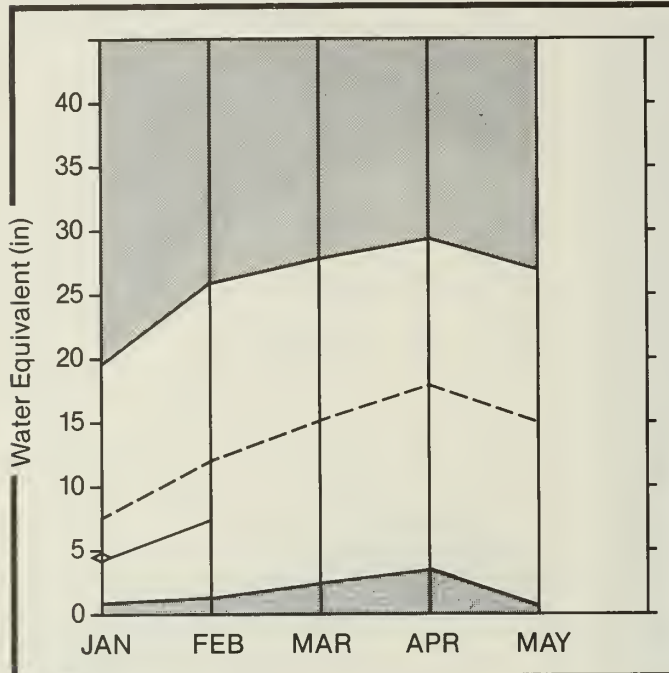
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The average is computed for the 1961-85 base period.

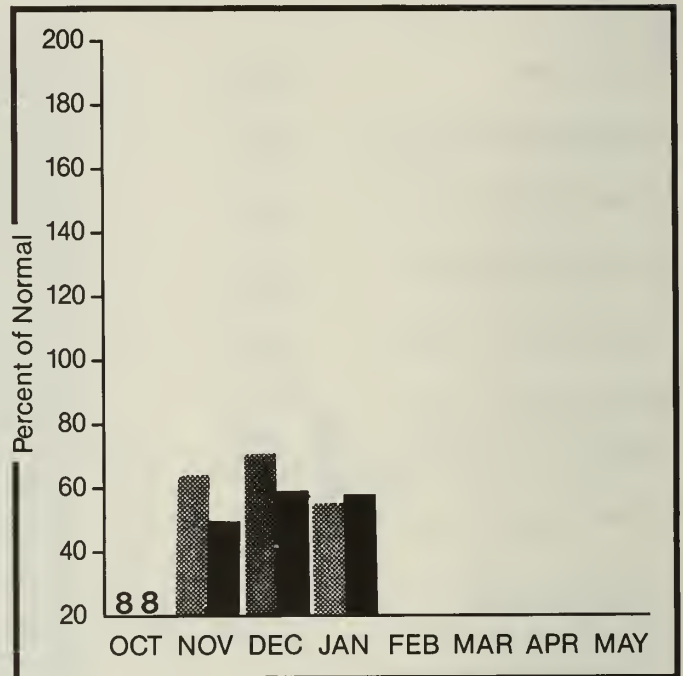
Big Wood, Little Wood, Big Lost, and Little Lost River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum



Average



Minimum



Current



Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

February 1 snowpack conditions remain well below normal over much of the basin, ranging from 60 to 66% of average on all drainages except the Little Lost River basin which reports 84% of average. Apr-July water supplies are forecast to be below normal ranging from 63 to 80% of average. Reservoir carryover storage is below normal in most major irrigation reservoirs, ranging from only 17% of average [8% of capacity] in Magic Reservoir to 81% of average in Mackay Reservoir. Magic Reservoir is not expected to fill to capacity and water could be in short supply for users served by this reservoir, unless above normal precipitation occurs over the next few months.

For more information contact your local Soil Conservation Service office.

BIG WOOD, LITTLE WOOD, BIG LOST AND LITTLE LOST RIVER BASIN

STREAMFLOW FORECASTS

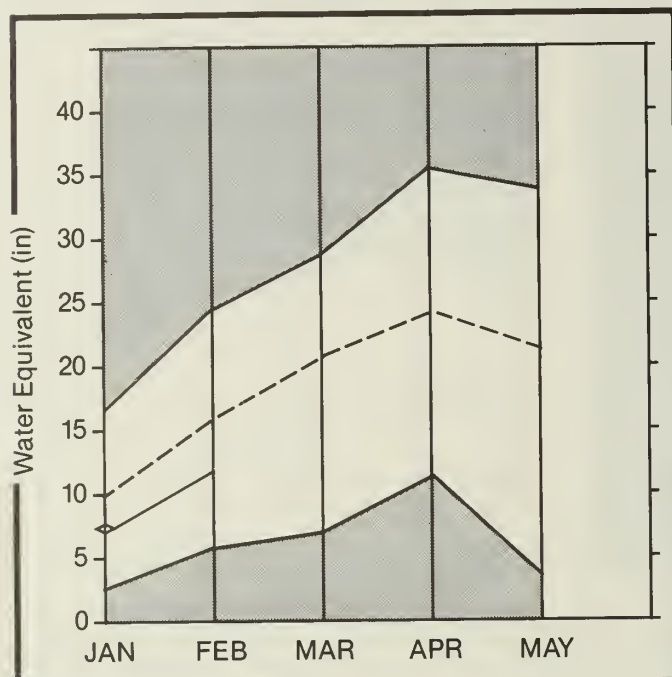
FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BIG WOOD nr Bellevue	APR-SEP APR-JUL	217.0 202.0	147.0 137.0	68 68	205.0 190.0	94 94	91.0 84.0	42 42
MAGIC RESERVOIR inflow	APR-SEP APR-JUL	338.0 322.0	220.0 210.0	65 65	380.0 360.0	112 112	57.0 55.0	17 17
LITTLE WOOD nr Carey	APR-SEP APR-JUL	107.0 99.0	67.0 62.0	63 63	100.0 92.0	93 93	35.0 32.0	33 32
BIG LOST at Howell Ranch	APR-SEP APR-JUL APR-JUN	219.0 192.0 148.0	149.0 131.0 101.0	68 68 68	215.0 190.0 145.0	98 99 98	66.0 58.0 45.0	30 30 30
BIG LOST nr Mackay 2	APR-SEP	195.0	134.0	69	205.0	105	65.0	33
LITTLE LOST bl Wet Ck	APR-SEP APR-JUL	38.8 31.4	30.0 24.0	77 76	45.0 36.0	116 115	15.0 12.0	39 38
LITTLE LOST nr Howe	APR-SEP APR-JUL	44.0 33.0	35.0 26.0	80 79	51.0 38.0	116 115	19.0 14.0	43 42

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **	THIS YEAR	LAST YEAR	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
MAGIC	191.5	15.7	114.5	92.8	Big Wood ab Magic	10	152 62
LITTLE WOOD	30.0	11.4	20.5	15.5	Canas Creek	3	170 60
CAREY VALLEY	14.4	2.7	6.6	---	Big Wood Total	12	155 61
MACKAY	44.5	24.2	32.8	30.0	Little Wood River	4	249 66
					Fish Creek	0	0 0
					Big Lost River	4	181 65
					Little Lost River	4	233 84



1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
 2 - Corrected for upstream diversions or changes in reservoir storage.
 The average is computed for the 1961-85 base period.



Willow Creek, Blackfoot, Upper Snake, and Portneuf River Basin

Mountain snowpack* (inches)

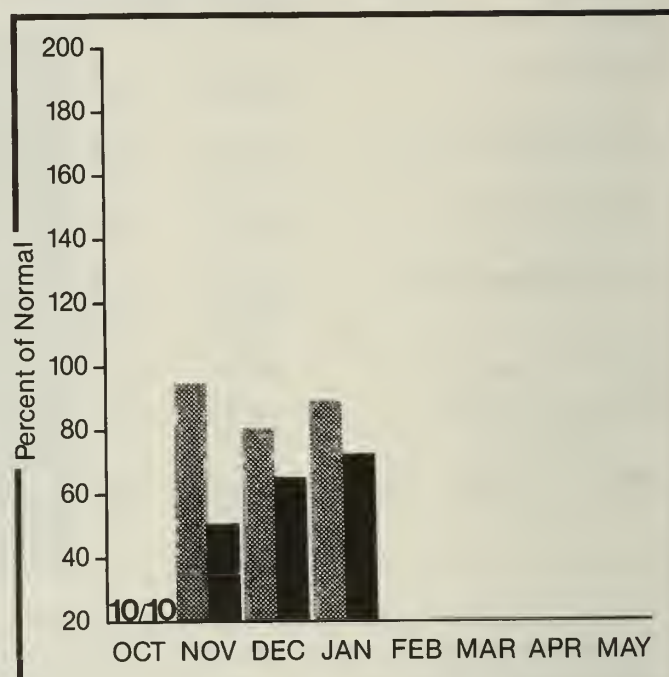


*Based on selected stations


Maximum 
Minimum 

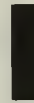
Average 
Current 

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation 

Year to date precipitation 

WATER SUPPLY OUTLOOK:

Although snowpacks in this basin are among the best reported in the state, February 1 surveys show that snowpack conditions remain below to well below normal. In comparison to normal, the lower elevation basins show a good improvement from the January 1 surveys, while the higher elevation basins remain about the same. Currently, snowpack conditions range from a low of 62% of average on the Salt River drainage to 80% on the Snake above Jackson and the Willow Creek drainage. Seasonal volume forecasts are below normal, ranging from 69 to 77% of average. Reservoir carryover storage is good with near average storage levels in most major reservoirs. In general, water supplies should be adequate to meet user needs assuming near normal precipitation from this data on.

For more information contact your local Soil Conservation Service office.

WILLOW CREEK, BLACKFOOT, UPPER SNAKE AND PORTNEUF RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
HENRY'S FORK nr Ashton 2	APR-SEP	746.0	575.0	77	665.0	89	490.0	66
	APR-JUL	557.0	430.0	77	495.0	89	365.0	66
HENRYS FORK nr Rexburg 2	APR-SEP	1595.0	1110.0	70	1450.0	91	770.0	48
	APR-JUL	1260.0	880.0	70	1145.0	91	610.0	48
FALLS RIVER nr Squirrel	APR-JUL	373.0	275.0	74	355.0	95	195.0	52
TETON RIVER ab S Leigh Ck	APR-SEP	194.0	147.0	76	176.0	91	118.0	61
	APR-JUL	145.0	110.0	76	132.0	91	88.0	61
TETON nr St. Anthony	APR-SEP	479.0	365.0	76	440.0	92	285.0	59
	APR-JUL	387.0	295.0	76	355.0	92	230.0	59
SNAKE at Moran 1	APR-SEP	888.0	670.0	75	830.0	93	515.0	58
PALISADES LAKE inflow 1	APR-SEP	3852.0	2860.0	74	3910.0	102	1820.0	47
SNAKE nr Heise 2	APR-SEP	4142.0	3070.0	74	4200.0	101	1930.0	47
	APR-JUL	3524.0	2610.0	74	3560.0	101	1650.0	47
SNAKE nr Blackfoot 2	APR-SEP	5680.0	4150.0	73	5400.0	95	2900.0	51
	APR-JUL	4589.0	3360.0	73	4360.0	95	2320.0	51
PORTNEUF at Topaz	MAR-SEP	109.0	76.0	70	116.0	106	36.0	33
	MAR-JUL	88.0	61.0	69	94.0	107	28.0	32

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
ISLAND PARK	127.6	104.0	108.1	100.7	Camas-Beaver Creeks	4	172	68
GRASSY LAKE	15.2	8.9	12.9	10.7	Henrys Fork River	6	134	70
JACKSON LAKE	624.4	93.6	82.6	535.6	Teton River	9	118	78
PALISADES	1200.0	760.3	1209.0	1016.0	Snake above Palisades	31	111	74
AMERICAN FALLS	1700.0	1106.6	1101.9	1141.5	Snake above Jackson Lake	9	142	80
BROWNLEE	975.3	572.3	731.9	665.4	Gros Ventre River	3	80	70
BLACKFOOT		NO REPORT			Greys River	4	121	76
HENRY'S LAKE	90.4	76.9	79.4	78.7	Salt River	5	97	62
RIRIE	96.5	47.4	40.5	48.5	Willow Creek	11	128	80
					Blackfoot River	7	135	72
					Portneuf River	6	142	71
					Toponce Creek	0	0	0

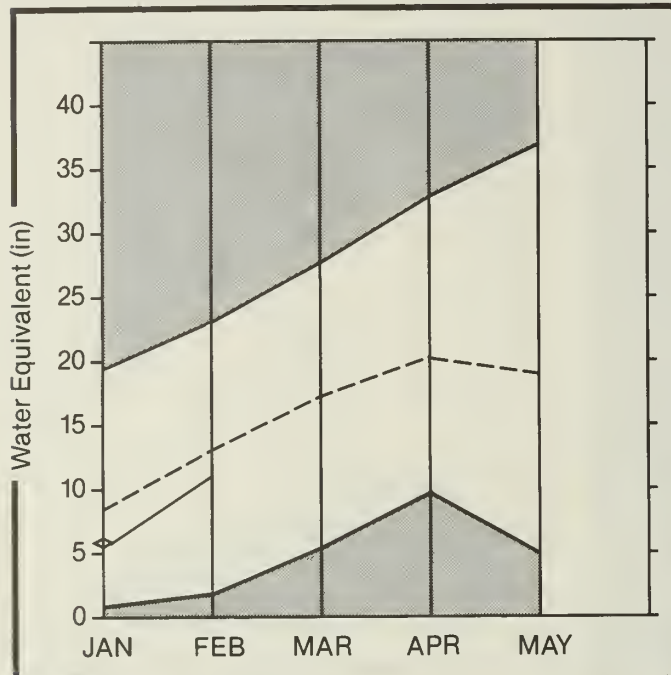
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

Southside Snake River Basin

Mountain snowpack* (inches)



*Based on selected stations

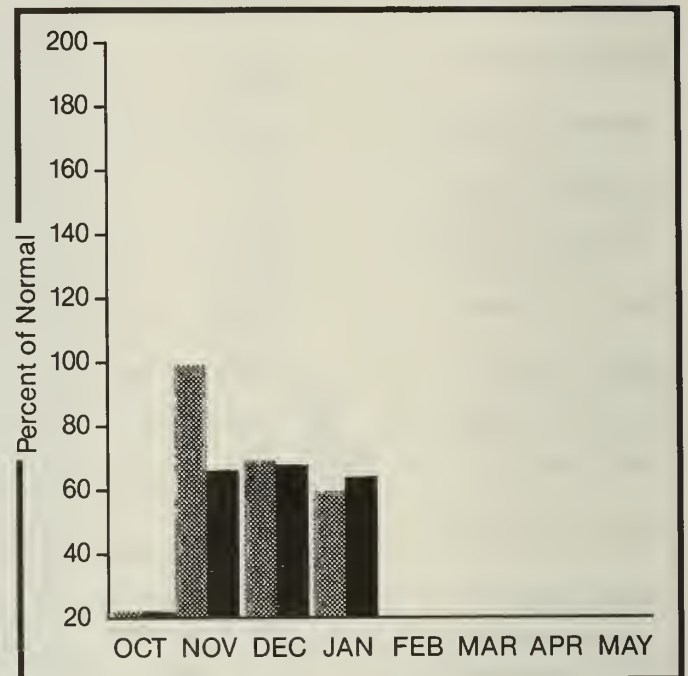
Maximum

Average

Minimum

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

In comparison to normal, snow conditions are reported to be about the same as last month with the exception of the Owyhee River basin which shows a good improvement. Snowpacks remain below normal throughout the basin ranging from 69 to 78% of average. One exception is the Bruneau River drainage which reports 84% of normal snowpack. Apr-July streamflows are forecast to be below normal, ranging from 65 to 77% of average. Reservoir carryover storage is well below normal ranging from only 36% of average in Oakley Reservoir to 73% in Salmon Falls Reservoir. Water supplies, however, should be adequate to meet most user needs providing near or above normal precipitation occurs from this date on. Below normal precipitation patterns, however, could create shortages on the Salmon Falls and Oakley Reservoir systems.

SOUTHSIDE SNAKE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
OAKLEY RESERVOIR inflow	APR-SEP	33.0	23.0	70	36.0	109	12.0	36
	APR-JUL	29.7	21.0	71	32.0	108	11.0	37
SALMON FALLS CK nr San Jacinto	MAR-SEP	102.0	77.0	75	113.0	111	38.0	37
	MAR-JUL	97.0	73.0	75	111.0	114	36.0	37
	MAR-JUN	91.0	68.0	75	104.0	114	34.0	37
BRUNEAU nr Hot Spring	MAR-SEP	260.0	200.0	77	305.0	117	96.0	37
	MAR-JUL	248.0	191.0	77	290.0	117	92.0	37
OWYHEE RIVER nr Gold Creek 2	APR-JUL	27.8	18.1	65	31.0	112	3.0	11
OWYHEE RIVER nr Owyhee 2	APR-JUL	86.0	49.0	57	98.0	114	9.0	10
OWYHEE LAKE inflow 1	APR-SEP	455.0	260.0	57	465.0	102	73.0	16
	APR-JUL	427.0	250.0	59	435.0	102	68.0	16
OWYHEE at Rome 2	APR-JUL	376.0	220.0	59	380.0	101	67.0	18

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	THIS YEAR	LAST YEAR	Avg.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
OAKLEY	77.4	9.5	28.4	26.5	Raft River	1	129 69
SALMON FALLS	182.6	35.8	92.9	49.3	Goose-Trapper Creeks	2	131 69
OWYHEE	715.0	187.5	488.9	443.9	Salmon Falls Creek	9	144 78
					Bruneau River	9	162 84
					Owyhee River	24	152 80

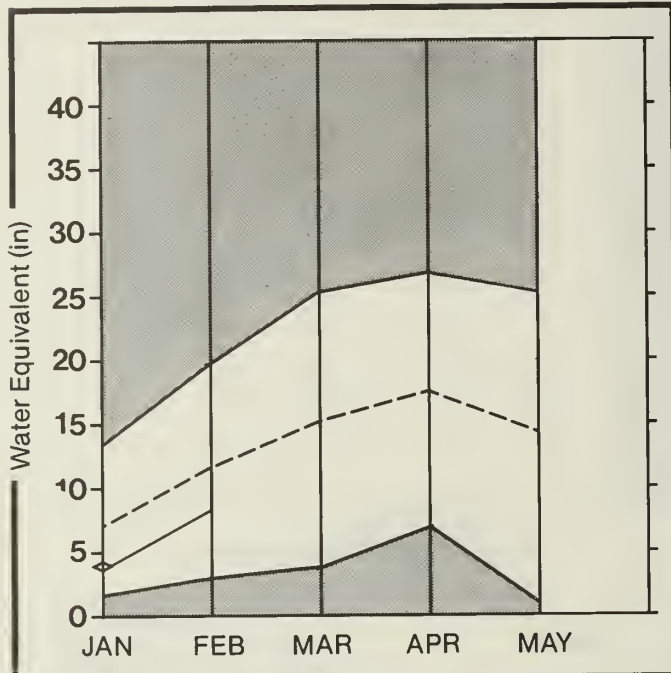
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

Great Basin

Mountain snowpack* (inches)



*Based on selected stations

Maximum



Average



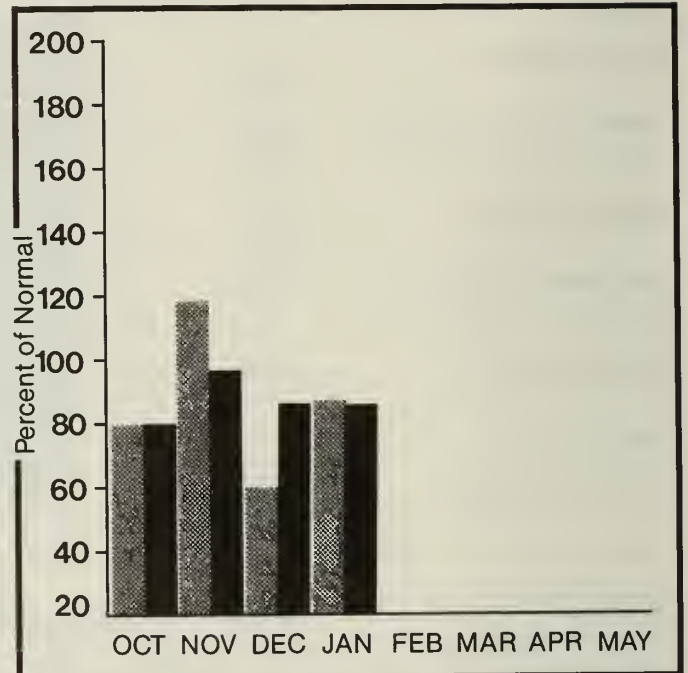
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

In comparison to normal, snowpack conditions show some improvement over those reported a month ago, but remain below to well below normal. Currently, snowpacks range from 63% of average on the Mink Creek drainage to 78% on Malad River. Streamflows are expected to be below normal, ranging from 68 to 75%. Carryover storage in Bear Lake is reported to be near normal for the 1st of February, while Montpelier Creek Reservoir is reported at 70% of normal. In general, water supplies should be adequate to meet user needs providing near normal precipitation occurs from this date on.

For more information contact your local Soil Conservation Service office.

GREAT BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BEAR at Harer	APR-SEP	310.0	225.0	73	335.0	108	135.0	44
MONTPELIER CK nr Montpelier	APR-SEP	13.9	10.5	75	16.0	115	5.0	36
CUB RIVER nr Preston	APR-SEP	51.8	36.0	70	53.0	102	19.0	37
	APR-JUL	46.8	32.0	68	47.0	100	17.0	36

RESERVOIR STORAGE					(1000AF)	WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF		
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE	
BEAR LAKE	1421.0	1013.4	1052.9	987.6	Bear River (above Harer)	10	134	72	
MONTPELIER CREEK	3.4	1.2	1.9	1.7	Montpelier Creek	7	155	76	
					Mink Creek	5	130	63	
					Cub River	3	134	69	
					Malad River	1	230	78	

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

SNOW DATA MEASUREMENTS

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
UPPER COLUMBIA BASIN							WATERSHED III						
WATERSHED I							WEISER, PAYETTE AND BOISE BASINS						
ABOVE BURKE	4100	2/01/88	25	6.7	9.0	14.2	ATLANTA SUMMIT	7600	1/27/88	52	15.5	10.7	24.2
ABOVE ROLANO	4350	2/01/88	---	10.8E	14.1	20.8	ATLANTA SUM PILLOW	7580	2/01/88	---	15.5	11.3	21.6
BEAR MOUNTAIN	5400	2/01/88	---	24.3E	37.0	41.5	ATLANTA TOWNSITE	5370	1/27/88	24	5.5	4.7	---
BEAR MTN PILLOW	5400	2/01/88	---	24.3	36.4	42.6	BANNER SUMMIT	7040	2/01/88	---	14.4E	11.6	21.7
BENTON MEADOW	2370	1/31/88	10	2.4	2.4	5.1	BANNER SUMMIT PILLOW	7040	2/01/88	---	13.0	9.6	19.4
BENTON SPRING	4920	1/31/88	30	8.2	8.6	13.2	BAD BEAR	4940	2/01/88	30	6.9	5.7	10.5
BREEZY SAOOLE	5010	2/01/88	52	13.7	15.2	20.6	BEAR BASIN	5350	2/01/88	---	6.9E	6.3	13.5
FORTY-NINE MEADOWS	4830	2/01/88	49	12.7	14.0	20.3	BEAR BASIN PILLOW	5350	2/01/88	---	6.5	5.9	13.4
FOURTH OF JULY SUM	3200	2/01/88	18	5.4	6.0	7.1	BEAR SAOOLE	6180	2/01/88	---	12.5E	10.5	21.6
HUMBOLOT GULCH	4250	2/01/88	23	5.4	8.5	10.7	BEAR SAOOLE PILLOW	6180	2/01/88	---	12.6	9.7	21.8
HUMBOLOT GLCH PILLOW	4250	2/01/88	---	5.1	8.2	9.7	BENNETT MOUNTAIN	6560	2/01/88	33	7.9E	6.0	12.9
KELLOGG PEAK AM	5560	2/01/88	---	12.2E	16.6	22.4	BENNETT MTN PILLOW	6560	2/01/88	---	6.8	5.8	13.6
LOOKOUT	5140	2/01/88	49	12.6	16.6	23.6	BIG CREEK SUMMIT	6580	2/01/88	---	17.5E	15.9	25.4
LOOKOUT PILLOW	5140	2/01/88	---	13.1	17.4	23.0	BIG CREEK SUM PILLOW	6580	2/01/88	---	15.5	13.8	22.0
LOST LAKE	6110	2/01/88	75	21.0	25.8	39.1	BOGUS BASIN	6340	2/02/88	44	11.2	6.2	16.7
LOST LAKE PILLOW	6110	2/01/88	---	22.3	33.0	44.4	BOGUS BASIN ROAD	5540	2/02/88	25	5.9	2.5	5.9
LOWER SANDS CREEK	3120	2/01/88	---	6.2E	8.1	12.3	BOULOER CREEK	5440	2/02/88	44	9.6	8.0	16.6
MOSQUITO RIDGE	5200	2/02/88	57	16.2	18.8	26.2	BRUNDAGE MOUNTAIN	7560	2/01/88	---	22.2E	---	30.8
MOSQUITO PILLOW	5200	2/01/88	---	16.2	19.1	26.3	BRUNOAGE RESV PILLOW	4500	2/01/88	---	11.9	11.1	---
SCHWEITZER BASIN	6090	1/29/88	76	25.0	25.4	33.0	COUCH SUMMIT	6840	1/25/88	33	7.6	4.1	13.2
SCHWEITZER BN PILLOW	6090	2/01/88	---	29.4	29.3	34.6	COZY COVE	5380	1/27/88	28	6.6	5.6	11.9
SCHWEITZER BOWL	4800	1/29/88	50	16.3	15.3	21.4	COZY COVE PILLOW	5380	2/01/88	---	9.2	5.8	17.9
SCHWEITZER RIOGE	6200	1/29/88	69	23.6	24.1	32.2	CRAWFORD R.S.	4860	1/28/88	17	4.0	3.0	6.3
SHERWIN	3200	1/29/88	23	6.4	6.5	9.8	OEADMAN GULCH	5600	1/30/88	42	10.3	5.8	12.5
SHERWIN PILLOW	3200	2/01/88	---	6.0	6.4	9.5	OEADWOOD AIRSTRIP	5360	2/01/88	---	8.7E	5.9	11.2
SUNSET	5540	2/01/88	33	8.0	13.2	22.8	OEADWOOD SUMMIT	6860	1/27/88	66	21.2	14.6	32.2
SUNSET PILLOW	5540	2/01/88	---	10.8	18.3	24.3	OEADWOOD SUM PILLOW	6860	2/01/88	---	22.0	15.4	35.5
CLEARWATER AND SALMON BASINS							WATERSHED IV						
WATERSHED II							BIG WOOD, LITTLE WOOD, BIG LOST AND LITTLE LOST BASINS						
BANNER SUMMIT	7040	2/01/88	---	14.4E	11.6	21.7	BEAR CANYON	7900	2/01/88	---	9.4E	3.6	12.4
BANNER SUMMIT PILLOW	7040	2/01/88	---	13.0	9.6	19.4	BEAR CANYON PILLOW	7900	2/01/88	---	8.5	3.0	11.4
BEAR BASIN	5350	2/01/88	---	6.9E	6.3	13.5	BENNETT MOUNTAIN	6560	2/01/88	33	7.9E	6.0	12.9
BEAR BASIN PILLOW	5350	2/01/88	---	6.5	5.9	13.4	BENNETT MTN PILLOW	6560	2/01/88	---	6.8	5.8	13.6
BIG CREEK SUMMIT	6580	2/01/88	---	17.5E	15.9	25.4	COPPER BASIN	7640	2/01/88	---	2.7E	1.4	6.3
BIG CREEK SUM PILLOW	6580	2/01/88	---	15.5	13.8	22.0	COUCH SUMMIT	6840	1/25/88	33	7.6	4.1	13.2
BOULOER CREEK	5440	2/02/88	44	9.6	8.0	16.6	DOLLARHIOE SUMMIT	8420	1/27/88	38	10.5	6.1	17.2
BREEZY SADDLE	5010	2/01/88	52	13.7	15.2	20.6	DOLLARHIOE SM PILLOW	8420	2/01/88	---	11.0	7.6	17.5
BRUNOAGE MOUNTAIN	7560	2/01/88	---	22.2E	---	30.8	GALENA	7440	2/01/88	---	7.8E	6.1	13.7
BRUNO CREEK	7920	2/03/88	39	11.0	---	13.7	GALENA PILLOW	7440	2/01/88	---	8.0	6.6	13.5
CAYUSE AIRSTRIP	3500	1/29/88	24	6.4	5.6	8.8	GALENA NEW	7470	1/29/88	33	8.3	6.3	15.2
COOL CREEK	6250	2/01/88	78	21.4	21.4	36.6	GALENA SUMMIT	8780	1/29/88	36	8.8	7.0	16.4
COOL CREEK PILLOW	6280	2/01/88	---	20.5	23.3	34.4	GALENA SUMMIT PILLOW	8780	2/01/88	---	9.5	6.5	13.2
CRATER MEADOWS	5960	1/29/88	58	17.2	19.2	30.2	GARFIELD R.S.	6560	1/28/88	19	4.4	1.9	7.4
CRATER MDWS PILLOW	5960	2/01/88	---	18.5	21.5	31.6	GARFIELD R.S. PILLOW	6560	2/01/88	---	4.8	2.1	7.3
CROOKEO FORK	3610	2/02/88	29	8.0	7.0	9.9	GRAHAM RANCH	6270	1/29/88	24	4.8	3.6	10.0
OEADWOOD SUMMIT	6860	1/27/88	66	21.2	14.6	32.2	HILTS CREEK	8000	1/28/88	27	7.0	2.5	7.7
OEADWOOD SUM PILLOW	6860	2/01/88	---	22.0	15.4	35.5	HILTS CREEK PILLOW	8000	2/01/88	---	8.9	3.9	8.9
ELK BUTTE	5550	2/01/88	57	14.4	13.0	25.5	HYNDMAN CREEK	7440	2/01/88	---	7.8E	3.5	10.0
ELK BUTTE PILLOW	5550	2/01/88	---	15.7	17.9	28.7	HYNDMAN PILLOW	7440	2/01/88	---	7.1	3.2	8.7
FISH LAKE AIRSTRIP	5650	1/29/88	65	19.1	18.5	27.0	LOST-WOOD OVIDE	7900	2/01/88	---	11.0E	6.8	16.0
FORTY-NINE MEADOWS	4830	2/01/88	49	12.7	14.0	20.3	LOST-WOOD OVO PILLOW	7900	2/01/88	---	11.2	6.2	16.1
GALENA SUMMIT	8780	1/29/88	36	8.8	7.0	16.4	MASCOT MINE	7780	2/01/88	---	8.4E	3.8	10.6
GALENA SUMMIT PILLOW	8780	2/01/88	---	9.5	6.5	13.2	MOONSHINE	7440	1/27/88	24	5.9	2.9	7.3
GIBBONS PASS	7100	1/29/88	40	10.7	10.1	16.0	MOONSHINE PILLOW	7440	2/01/88	---	5.8	4.5	7.5
HEMLOCK BUTTE	5810	1/29/88	57	16.4	19.2	34.0	MOUNT BALOY	8920	1/28/88	37	9.2	5.9	14.5
HEMLOCK BUTTE PILLOW	5810	2/01/88	---	18.7	21.9	33.3	MULDOON	6320	1/28/88	15	3.1	1.7	5.6
HOODOO BASIN	6050	1/30/88	80	23.5	26.6	34.6	SAWMILL CANYON	7000	1/27/88	22	4.0	3.4	5.7
HOODOO CREEK	5900	1/30/88	71	19.4	23.0	31.7	SOLOIER R.S.	5740	1/25/88	24	5.9	2.5	9.5
LOLO PASS	5240	2/02/88	45	13.2	16.4	20.6	SOLOIER R.S. PILLOW	4330	2/01/88	---	6.1	3.3	---
LOLO PASS PILLOW	5240	2/01/88	---	14.3	14.4	22.2	SOLDIER R.S. PILLOW	4330	2/01/88	---	3.2E	2.7	6.0
LOST LAKE	6110	2/01/88	75	21.0	25.8	39.1	STICKNEY MILL	7430	2/01/88	---	2.8	2.1	5.4
LOST LAKE PILLOW	6110	2/01/88	---	22.3	33.0	44.4	STICKNEY MILL PILLOW	7430	2/01/88	---	7.8	2.7	11.9
MEADOW LAKE	9150	2/01/88	---	6.8E	7.3	13.1	SWEDE PEAK	7640	1/28/88	30	7.2	2.9	10.2
MEADOW LAKE PILLOW	9150	2/01/88	---	5.2	7.3	13.4	SWEDE PEAK PILLOW	7640	2/01/88	---	7.2	2.9	10.2
MILL CREEK SUMMIT	8800	2/01/88	---	10.0E	8.0	16.0	VIENNA MINE	8960	1/27/88	50	15.5	11.3	25.1
MILL CREEK ST PILLOW	8800	2/01/88	---	9.6	---	15.0	VIENNA MINE PILLOW	8960	2/01/88	---	16.3	11.6	25.1
MOONSHINE	7440	1/27/88	24	5.9	2.9	7.3	WET CREEK SUMMIT	7680	1/28/88	28	7.1	1.5	7.8
MOONSHINE PILLOW	7440	2/01/88	---	5.8	4.5	7.5							
MOOSE CREEK	6200	2/01/88	37	9.2	6.0	12.1							
MOOSE CR PILLOW	6200	2/01/88	---	9.1	7.4	12.2							
MORGAN CREEK	7600	2/01/88	---	7.0E	5.7	9.6							
MORGAN CREEK PILLOW	7600	2/01/88	---	6.8	5.4	9.2							
MOUNTAIN MEADOWS	6360	2/01/88	---	9.9E	8.8	15.8							
MOUNTAIN MDWS PILLOW	6360	2/01/88	---	11.3	10.7	18.3							
NEZ PERCE PASS	6570	2/01/88	---	7.6E	---	10.9							
PIERCE R.S.	3080	2/01/88	21	5.6	5.1	8.1							
ROCK FLAT SUMMIT	5310	1/31/88	36	7.5	8.4	12.6							
SAOOLE MOUNTAIN	7940	1/29/88	42	11.4	11.7	17.6							
SAVAGE PASS	6170	2/02/88	48	14.0	11.4	17.7							
SAVAGE PASS PILLOW	6170	2/01/88	---	13.6	13.4	18.3							
SECESH SUMMIT	6520	1/31/											

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
WILLOW, BLACKFOOT, UPPER SNAKE AND PORTNEUF BASINS							WATERSHED V						
ASPEN GROVE	6500	2/01/88	—	7.8E	5.7	8.9	ANTELOPE RIDGE	6180	2/01/88	—	3.0E	3.5	—
AUSTIN BROTHERS RNCH	6400	1/26/88	21	4.9	3.5	6.6	BADGER GULCH	6660	2/01/88	—	6.7E	5.1	8.1
BEAVERDAM CREEK	6120	1/30/88	21	4.7	—	6.5	BATTLE CREEK	AM 5720	1/28/88	9	2.2	1.2	2.9
BIG SPRINGS	6400	1/27/88	36	8.9	7.5	14.0	BEAR CREEK	7800	1/28/88	35	10.4	6.0	13.5
BIRCH CREEK	6800	1/28/88	21	5.4	5.6	7.7	BEAR CK SNOTEL	7800	2/01/88	—	10.0	5.0	13.0
BLACK BEAR	7950	2/01/88	—	20.2e	—	26.4	BIG BEND	6700	1/25/88	22	5.4	2.0	6.2
BLUE LEDGE MINE	6900	2/01/88	—	8.4E	4.4	11.8	BOSTETTER R.S.	7500	2/01/88	—	8.6E	6.6	14.2
BLUE RIDGE	6780	1/28/88	35	10.1	7.8	13.6	BOSTETTER RS	PILLOW 7500	2/01/88	—	7.5	5.5	12.4
BONE	6200	1/28/88	19	4.4	2.5	5.6	BULL BASIN	AM 5460	1/28/88	9	1.8	1.2	1.4
BROCKMAN STATION	6430	1/28/88	24	6.5	5.1	6.8	CLEAR CREEK MEADOWS	9420	2/01/88	—	9.3E	—	15.2
CAMP CREEK	6580	1/28/88	20	4.0	3.2	7.2	COLUMBIA BASIN	AM 6650	1/25/88	—	5.8E	3.4	6.5
COULTER CREEK	7020	2/01/88	44	12.1	6.5	15.1	OEAOLINE	7400	1/30/88	29	7.8	8.3	15.5
COULTER CREEK PILLOW	7020	2/01/88	—	11.6	8.1	15.9	OEAOLINE SOUTH	7450	1/30/88	39	11.7	11.2	16.9
CRAB CREEK	6860	2/01/88	—	7.4E	3.6	10.8	FAWN CREEK	AM 7050	1/25/88	—	5.2e	—	5.8
CRAB CREEK PILLOW	6860	2/01/88	—	7.8	3.9	11.4	FRY CANYON	6700	1/25/88	19	4.6	—	5.5
EAST CREEK	7000	1/30/88	31	7.1	—	7.7	GOAT CREEK	8800	2/01/88	—	9.8E	5.4	11.7
FALL CREEK	6820	1/28/88	19	4.7	4.0	6.8	GOLO CREEK	6600	1/25/88	16	3.7	1.3	3.9
GRASSY LAKE	7270	1/28/88	59	18.8	14.3	24.0	HOWELL CANYON	7980	2/01/88	—	12.6E	9.8	18.2
GRASSY LAKE PILLOW	7270	2/01/88	—	15.7	14.8	24.8	HOWELL CANYON PILLOW	7980	2/01/88	—	10.6	8.1	15.3
INDIAN MEADOWS	9420	1/28/88	64	21.1	13.9	24.8	HUMMINGBIRD SPRINGS	8950	2/01/88	—	13.8E	8.9	15.5
ISLAND PARK	6290	1/27/88	33	8.1	6.6	11.6	HYDE PASTURE	AM 5760	1/28/88	9	2.2	.1	4.7
ISLAND PARK PILLOW	6290	2/01/88	—	9.2	6.3	11.5	JACK CREEK, LOWER	6800	1/25/88	19	4.6	2.6	2.6
JACKPINE CREEK	7350	1/28/88	41	12.5	8.6	15.2	JACKS PEAK	8420	1/25/88	42	9.4	9.1	14.4
KILGORE	6320	2/01/88	29	5.9	3.7	8.2	JOHNSTON POND	6700	1/28/88	6	1.4	2.4	—
LAVA CREEK	7350	1/28/88	32	8.7	6.8	10.1	LANGFORD FLAT CREEK	5980	1/30/88	19	5.1	2.2	5.1
LOWER PEBBLE	5780	1/30/88	34	8.1	4.0	9.3	LAUREL ORAW	6700	1/25/88	25	5.3	4.9	5.8
MADISON PLATEAU	7750	2/01/88	—	11.0e	—	14.4	LOOKOUT BUTTE	AM 5650	1/28/88	2	.3	.0	.3
MC RENOLDS RESERVOIR	6720	1/28/88	34	9.1	6.8	13.1	LOUSE CANYON	AM 6440	1/28/88	15	3.4	2.7	4.1
MINK CREEK	6410	1/30/88	35	8.5	6.8	12.4	MAGIC MOUNTAIN	6880	1/30/88	39	9.9	6.7	13.1
MUD CREEK	7100	1/28/88	39	10.8	9.8	13.3	MAGIC MTN	PILLOW 6880	2/01/88	—	9.8	7.0	13.1
PACKSADOLE SPRING	8200	1/28/88	48	14.9	10.8	19.0	MUD FLAT	5730	2/01/88	—	3.8E	3.7	4.8
PEBBLE CREEK	6550	1/30/88	34	7.9	4.5	11.5	OREGON CANYON	AM 6950	1/28/88	15	3.4	.8	4.3
PHILLIPS BENCH	8200	1/29/88	54	14.9	14.8	21.2	POLE CREEK R.S.	8330	2/01/88	—	11.8E	8.2	13.0
PINE CREEK PASS	6810	1/29/88	38	9.9	7.7	11.6	QUINN RIDGE	AM 6300	1/28/88	19	4.2	1.2	1.5
SAWTELL MOUNTAIN	8720	1/27/88	54	16.7	11.5	23.0	REO CANYON	AM 6650	1/28/88	18	4.1	3.3	5.5
SEDGEWICK PEAK	7850	1/30/88	36	9.2	—	12.8	ROEO FLAT	6800	1/25/88	21	4.8	—	4.7
SHEEP MOUNTAIN	6570	1/28/88	28	7.8	5.0	9.2	SEVENTYSIX CREEK	7100	1/25/88	23	5.8	4.5	8.3
SHEEP MTN PILLOW	6570	2/01/88	—	8.1	5.6	10.1	SEVENTYSIX CK SNOTEL	7100	1/25/88	20	4.4	2.4	6.3
SLUG CREEK DIVIOE	7230	1/27/88	30	7.5	5.8	11.3	SHOSHONE BASIN	5810	2/01/88	—	4.8E	2.3	4.8
SLUG CK OVD PILLOW	7230	2/01/88	—	8.7	5.4	12.9	SOUTH MOUNTAIN	6500	2/03/88	36	10.2	7.2	10.1
SOMSEN RANCH	6840	1/26/88	32	7.7	5.6	10.1	SOUTH MTN	PILLOW 6500	2/01/88	—	10.0	6.8	9.6
SOMSEN RANCH PILLOW	6800	2/01/88	—	7.0	4.8	9.3	SUCCOR CREEK	AM 6100	1/28/88	21	4.8	2.6	4.4
STATE LINE	6660	1/29/88	33	8.0	7.4	9.9	TAYLOR CANYON	6200	1/25/88	15	3.3	1.4	4.1
TETON PASS W.S.	7740	1/29/88	48	12.9	15.2	17.5	TOE JAM AM	AM 7700	2/01/88	—	5.9e	2.0	7.4
TEX CREEK	6650	2/01/88	—	5.1E	3.6	6.2	VAUGHT RANCH	AM 5830	1/28/88	19	4.0	1.8	3.0
VALLEY VIEW	6680	1/27/88	26	5.8	5.9	11.4	WAR EAGLE	7280	1/28/88	16	4.8	8.4	18.3
WHISKEY CREEK	6800	2/01/88	—	8.4e	—	13.2							
WHITE ELEPHANT	7710	1/27/88	43	12.0	6.8	17.0							
WHITE ELEPHANT PILL	7710	2/01/88	—	14.6	10.0	18.1							
WILDHORSE DIVIDE	6490	1/30/88	34	8.0	6.9	11.7							
WILDHORSE DVO PILLOW	6490	2/01/88	—	7.8	6.8	10.7							
							GREAT BASIN						
							WATERSHED VII						
							CUB RIVER R.S.	5450	2/01/88	—	5.2E	4.3	6.6
							EMIGRANT SUMMIT	7390	1/28/88	42	11.2	8.0	16.9
							EMIGRANT SUM PILLOW	7390	2/01/88	—	10.8	8.0	19.3
							EMIGRATION CANYON	6500	1/28/88	24	5.1	4.5	7.6
							FRANKLIN BASIN	8020	1/25/88	—	10.3E	8.1	16.6
							GIVEOUT	6860	1/27/88	30	6.6	3.9	8.5
							GIVEOUT PILLOW	6840	2/01/88	—	8.0	3.3	8.9
							GIVEOUT NEW	6930	1/27/88	29	7.1	3.2	7.6
							LIBERTY SPRING	8600	2/01/88	—	13.8E	10.1	24.2
							LITTLE BEAVER	6790	1/27/88	35	9.0	4.3	10.5
							LOWER HOME CANYON	7640	1/28/88	28	6.7	4.7	9.7
							MONTPELIER CREEK	6540	2/01/88	—	5.0E	2.6	5.7
							OXFORD MOUNTAIN	6800	2/01/88	—	6.4E	2.7	—
							OXFORD SPRING	6740	2/01/88	—	6.2E	2.7	7.9
							OXFORD SPRING PILLOW	6740	2/01/88	—	6.2	2.2	8.9
							STRAWBERRY CREEK	5820	1/28/88	28	6.1	4.0	7.5
							STRAWBERRY-MINK DVD	6720	2/01/88	—	8.4E	7.6	14.8
							UPPER HOME CANYON	8560	1/28/88	40	10.6	9.3	15.8
							WILLOW FLAT	6070	2/01/88	—	8.2E	5.3	11.2

THE HISTORY OF THE

NAME	RANK	REGIMENT	COMPANY	DATE	PLACE
JAMES	CAPTAIN	1ST	1ST	1861	VA.
JOHN	MAJOR	2ND	2ND	1862	VA.
WILLIAM	LIEUTENANT	3RD	3RD	1863	VA.
EDWARD	CAPTAIN	4TH	4TH	1864	VA.
THOMAS	MAJOR	5TH	5TH	1865	VA.
HENRY	LIEUTENANT	6TH	6TH	1866	VA.
CHARLES	CAPTAIN	7TH	7TH	1867	VA.
ALFRED	MAJOR	8TH	8TH	1868	VA.
ROBERT	LIEUTENANT	9TH	9TH	1869	VA.
GEORGE	CAPTAIN	10TH	10TH	1870	VA.
FRANK	MAJOR	11TH	11TH	1871	VA.
JOHN	LIEUTENANT	12TH	12TH	1872	VA.
WILLIAM	CAPTAIN	13TH	13TH	1873	VA.
EDWARD	MAJOR	14TH	14TH	1874	VA.
THOMAS	LIEUTENANT	15TH	15TH	1875	VA.
HENRY	CAPTAIN	16TH	16TH	1876	VA.
CHARLES	MAJOR	17TH	17TH	1877	VA.
ALFRED	LIEUTENANT	18TH	18TH	1878	VA.
ROBERT	CAPTAIN	19TH	19TH	1879	VA.
GEORGE	MAJOR	20TH	20TH	1880	VA.

The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State

Idaho Department of Water Resources
Soil and Water Conservation Districts of Idaho

Federal

U.S. Department of Agriculture
Forest Service
U.S. Department of Army
Corps of Engineers
U.S. Department of Commerce
NOAA, National Weather Service
U.S. Department of Interior
Bureau of Reclamation
Geological Survey, Water Resources Division
Shoshone-Bannock Tribal Council

Local

Big Lost River Irrigation District
Big Wood Irrigation Company
Boise Project Board of Control
Idaho Water District #01
Lewiston Orchards Irrigation District
Little Wood River Irrigation District
North Board of Control — Owyhee Project
Salmon Falls Irrigation Company
South Board of Control — Owyhee Project

Private

Cyprus Mining Company
FMC Corporation
Idaho Power Company
Le Bois Resort
Washington Water Power Company

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

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SOIL CONSERVATION SERVICE

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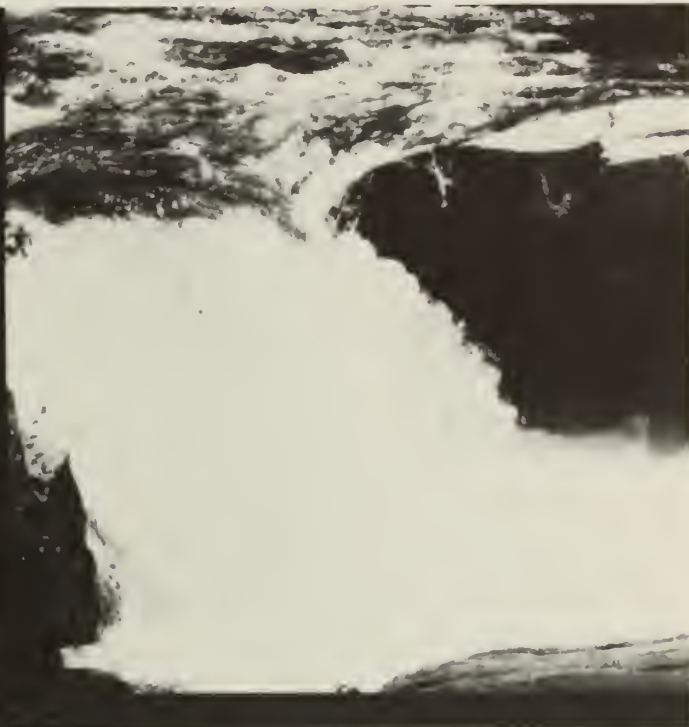
Soil
Conservation
Service

Boise,
Idaho



Idaho Water Supply Outlook

March 1, 1988



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University of Illinois
at Urbana-Champaign

Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are terms reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola, Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Denver, CO 80211
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 87102-3157
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97204
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201-1080
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209.

Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Idaho Water Supply Outlook

and

Federal — State — Private Cooperative Snow Surveys

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Boise, Idaho

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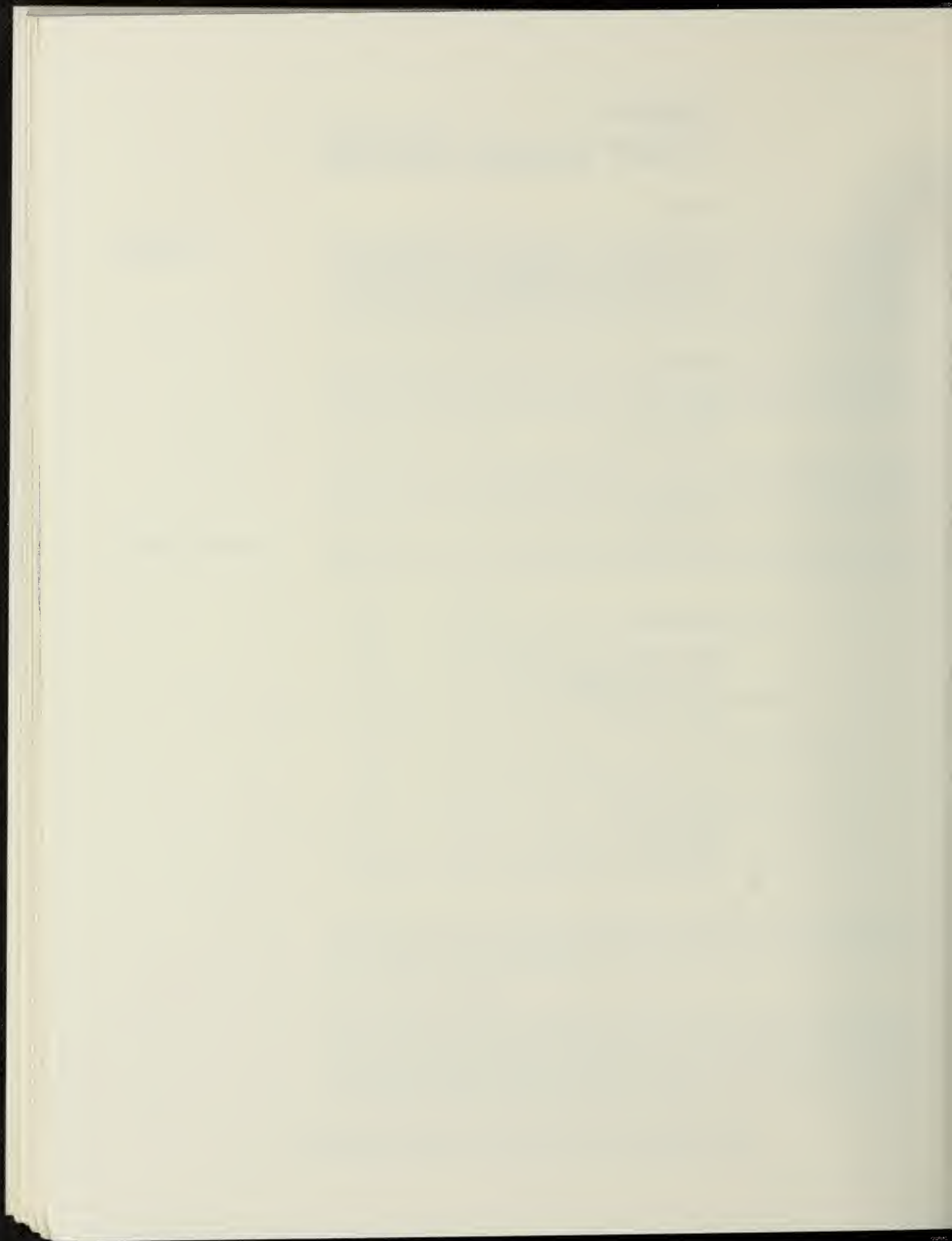


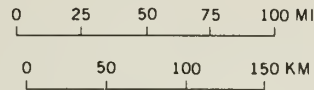
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STATE STREAMFLOW PROSPECTS MAP

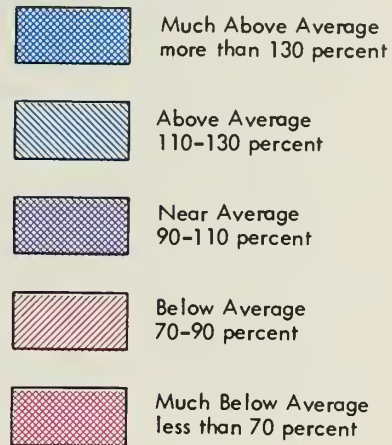
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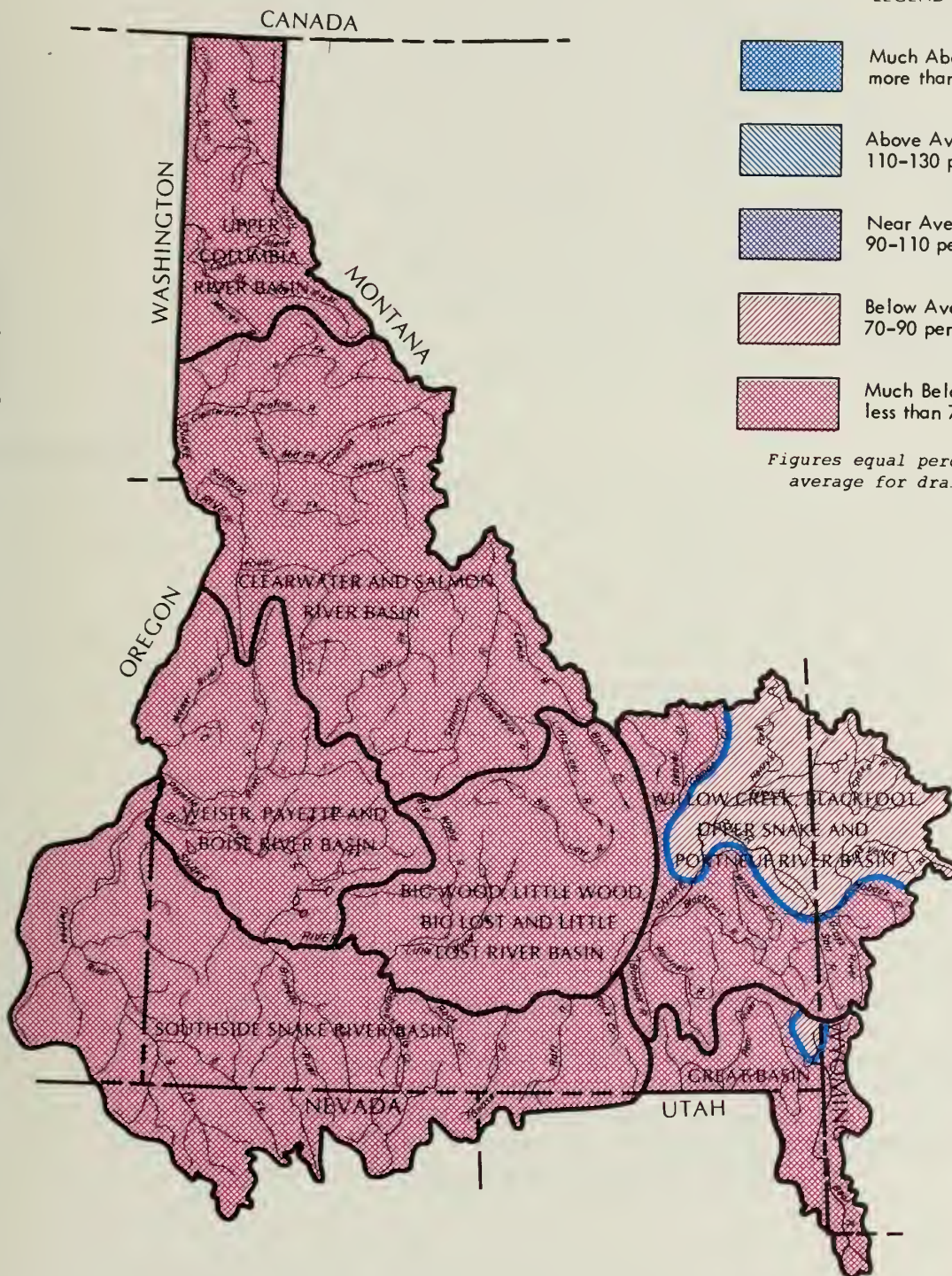
STREAMFLOW PROSPECTS IDAHO



LEGEND



Figures equal percent of average for drainage.





GENERAL OUTLOOK

SUMMARY:

IN GENERAL, MARCH 1 SNOW SURVEYS SHOW LITTLE OR NO IMPROVEMENT IN IDAHO'S MOUNTAIN SNOWPACK AND CONDITIONS REMAIN BELOW TO WELL BELOW AVERAGE THROUGHOUT THE STATE. THE LOW SNOWPACK COUPLED WITH DRY SOILS AND LOW RESERVOIR STORAGE LEVELS PAINT A BLEAK WATER SUPPLY PICTURE FOR THE STATE. STREAMFLOWS FOR THE FORTHCOMING IRRIGATION SEASON ARE FORECAST TO BE WELL BELOW NORMAL AND WATER IS EXPECTED TO BE IN SHORT SUPPLY OVER PORTIONS OF CENTRAL AND SOUTHCENTRAL IDAHO. WATER USERS ARE ADVISED TO STAY IN TOUCH WITH THEIR LOCAL WATER MASTER TO ASSESS THEIR INDIVIDUAL WATER SUPPLY SITUATION. FARMERS AND RANCHERS SHOULD USE EFFECTIVE MEASURES TO ACHIEVE MAXIMUM USE OF THE AVAILABLE WATER SUPPLY. A LIST OF SUGGESTED CONSERVATION PRACTICES CAN BE FOUND IN THE BACK OF THIS REPORT.

SNOWPACK:

February brought good improvement in snowpack conditions in the Coeur d'Alene, Spokane, and Clearwater basins of northern Idaho and slight improvement in the Henry's Fork and Upper Snake basins in eastern Idaho and western Wyoming. Elsewhere, conditions remained about the same or have decreased slightly in comparison to normal from a month ago. March 1 snowpacks remain below to well below normal throughout the state with the worst conditions in the south central mountains and the lower elevation basins of the Idaho Panhandle. Currently, snowpack conditions range from a low of 50% of average on the Palouse River basin to a high of 86% on the Snake River above Jackson, Wyoming. Snowpacks range from 50 to 71% of normal in the Idaho Panhandle, 68 to 81% on the Clearwater and Salmon drainages, 51 to 68% in southcentral Idaho, 61 to 80% in the eastern part of the state, and 58 to 79% in extreme southern and southeastern Idaho. Above normal temperatures during the last half of February began melting some lower elevation snowpacks. This melt is about 2 weeks earlier than normal and similar to the timing of last year's snowmelt. If mild temperatures continue, snowmelt and runoff could occur 2-4 weeks early again this year.

PRECIPITATION:

It was another below normal precipitation month as the drought continues. February began with several significant storms that crossed the state during the first two weeks of February, but the remainder of the month was very dry. The state received about 40% of normal precipitation for February, but the range was quite wide. Southcentral Idaho was extremely low with Burley at only 3% of normal, Jerome 5%, and Twin Falls 10%. The remainder of southern Idaho did not fare much better with the southwest from just 3% at Parma to 40% of normal at Boise. Southeast Idaho ranged from 11% at Malad to 24% at Idaho Falls. The central portion of Idaho was somewhat better, but still well below normal from 33% at McCall to 73% at Dixie. There were isolated pockets of normal rainfall, with Fenn Ranger Station at 112%. The northern third of the state recorded the most rainfall with Pierce at 85% of normal and Elk River 72%. Porthill at 34%, and Sandpoint at 43% were among the lowest precipitation amounts in the north. It was an unusually warm month. Record high temperatures were observed at Lewiston, Boise, Twin Falls, and Pocatello. The warmest days occurred on the 28th and 29th of February. Salmon recorded a departure of plus 5 degrees for the month and Pocatello plus 3.3 degrees. All stations averaged above normal.

RESERVOIRS:

Carryover storage remains below to well below normal in most reservoirs across the state except in the Upper Snake basin where storage levels are near or slightly above normal. The combined storage in 24 key reservoirs is currently 87% of average, but only 58% of capacity. The lowest storage volumes are found in south central and southwestern Idaho where storage levels range from only 23% of average (12% of capacity) in Magic Reservoir to 95% of average (38% of capacity) in Lucky Peak. Reservoir levels in northern Idaho are below normal also, ranging from 46% of normal in Coeur d'Alene Lake to 88% in Dworshak. One exception is Priest Lake which reports 130% of normal storage. With the deficient snowpack and possibility of early irrigation withdrawals, many reservoir systems across central, southcentral, and southwestern Idaho are not likely to fill this spring.

STREAMFLOW:

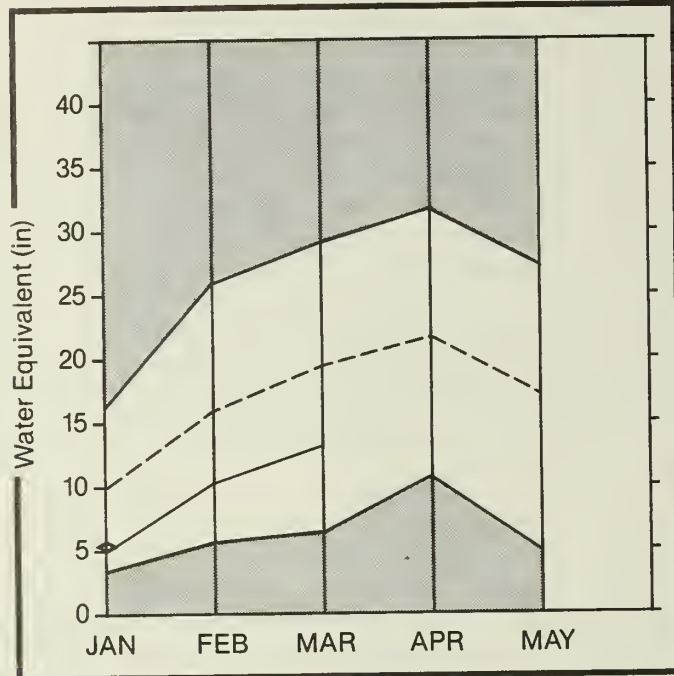
Much of Idaho's water supply for the 1988 irrigation season will be marginal at best. Spring and summer streamflow projections indicate that below to well below normal flows will occur on most streams throughout the state. Apr-July volume forecasts range from 59 to 66% of normal in northern Idaho, 50 to 67% in the central, southcentral, and southwestern part of the state, 70 to 80% in the Upper Snake Basin and 50-75% in the Great Basin area of southeastern Idaho. Water is expected to be in short supply in most areas of central, southcentral, and southwestern Idaho. Supplies should be adequate to meet most user needs on the Snake mainstem in eastern Idaho, but some shortages may occur on the lower elevation tributaries of the Portneuf and Blackfoot. Water users are advised to contact irrigation districts, reservoir managers, and others who monitor and regulate water supplies for more information.

RECREATIONAL OUTLOOK:

Recreational river boaters need to continue to view below normal streamflow forecasts as an opportunity to access Idaho's mountain rivers earlier than normal. Late May or early June launch dates look very probable at this time. Desert river floating, such as the Jarbidge, Bruneau, and Owyhee, will depend largely on precipitation and temperature patterns in April and May. Above normal temperatures over an extended period of time in early spring could preclude summer outings on desert rivers.

Upper Columbia Basin

Mountain snowpack* (inches)



*Based on selected stations

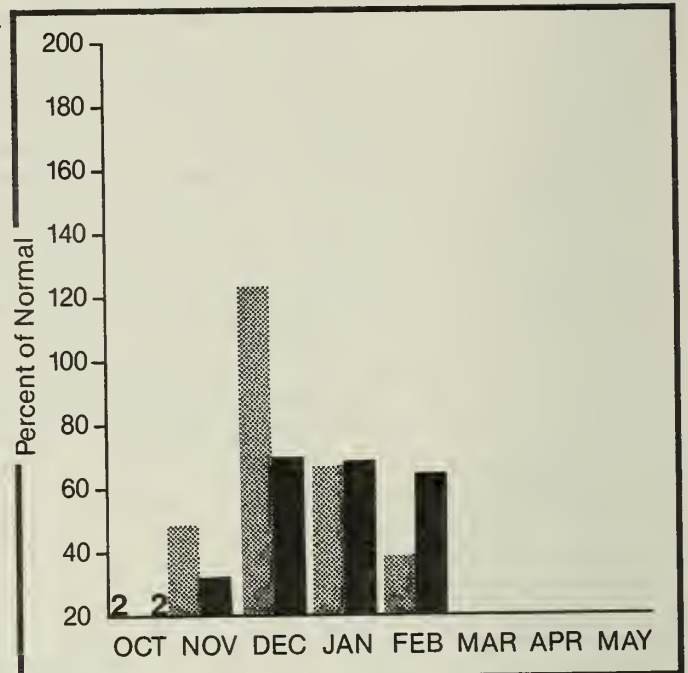
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

The March 1 snow surveys show good improvement in snowpack conditions on the Coeur d'Alene and St. Joe River basins, but elsewhere conditions remain about the same as reported on February 1. Snowpacks currently range from a low of 50% of average on the Palouse basin to 71% on the Priest River, with most basins in the 59-66% of average range. Apr-July streamflow forecasts are well below normal and remain about the same or have decreased slightly from those issued last month. Forecasts currently range from 57 to 66% of normal. Reservoir carryover storage varies from only 46% of normal in Coeur d'Alene Lake to 130% of average in Priest Lake. Soils are also much drier than normal as a result of the dry summer and fall conditions.

For more information contact your local Soil Conservation Service office.

UPPER COLUMBIA RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
KOOTENAI at Leona 2	APR-SEP	8441.0	5570.0	66	7260.0	86	3800.0	45
	APR-JUL	7340.0	4840.0	66	6300.0	86	3300.0	45
	APR-JUN	5899.0	3890.0	66	5000.0	85	2700.0	46
CLARK FORK at White Horse Rapids 2	APR-SEP	13370.0	9090.0	68	12100.0	91	6020.0	45
	APR-JUL	12150.0	8260.0	68	11000.0	91	5470.0	45
	APR-JUN	10360.0	7045.0	68	9430.0	91	4660.0	45
PEND OREILLE LAKE inflow 2	APR-SEP	14930.0	9880.0	66	13120.0	88	6600.0	44
	APR-JUL	13650.0	9040.0	66	12000.0	88	6040.0	44
	APR-JUN	11780.0	7770.0	66	10400.0	88	5180.0	44
PRIEST RIVER at Priest 2	APR-SEP	893.0	585.0	66	815.0	91	355.0	40
	APR-JUL	838.0	550.0	66	770.0	92	335.0	40
SPOKANE at Post Falls 2	APR-SEP	2820.0	1700.0	60	2680.0	95	700.0	25
	APR-JUL	2723.0	1660.0	61	2600.0	95	750.0	28
ST. JOE at Calder	APR-SEP	1281.0	780.0	61	1080.0	84	470.0	37
	APR-JUL	1211.0	735.0	61	1020.0	84	445.0	37
COEUR D' ALENE at Enaville	APR-SEP	830.0	475.0	57	860.0	104	170.0	20
	APR-JUL	789.0	445.0	56	820.0	104	160.0	20

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE 1 CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
HUNGRY HORSE	3451.0	1400.0	2295.0	2257.0	Kootenai ab Bonners Ferry	54	84 64
FLATHEAD LAKE	1791.0	889.0	635.1	901.0	Pend Oreille River	162	103 70
PEND OREILLE	1155.0	560.4	150.7	831.8	Clark Fork River	111	113 73
NOXON RAPIDS	335.0	321.6	291.7	297.6	Priest River	5	92 71
COEUR D'ALENE	222.8	102.2	123.2	220.9	Rathdrum Creek	3	91 71
PRIEST LAKE	97.7	44.8	32.8	34.4	Havden Lake	4	86 60
					Coeur d'Alene River	10	95 66
					St. Joe River	7	97 66
					Spokane River	21	95 66
					Palouse River	2	64 50

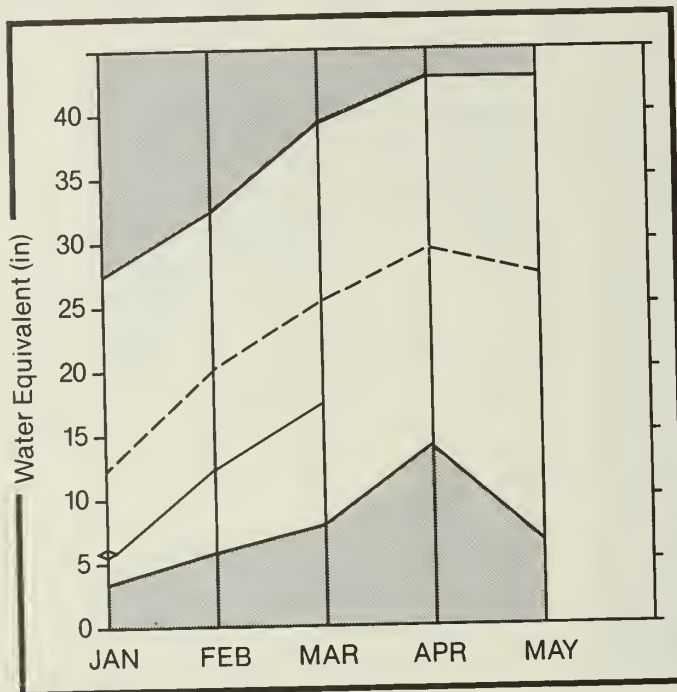
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

Clearwater and Salmon River Basin

Mountain snowpack* (inches)



*Based on selected stations

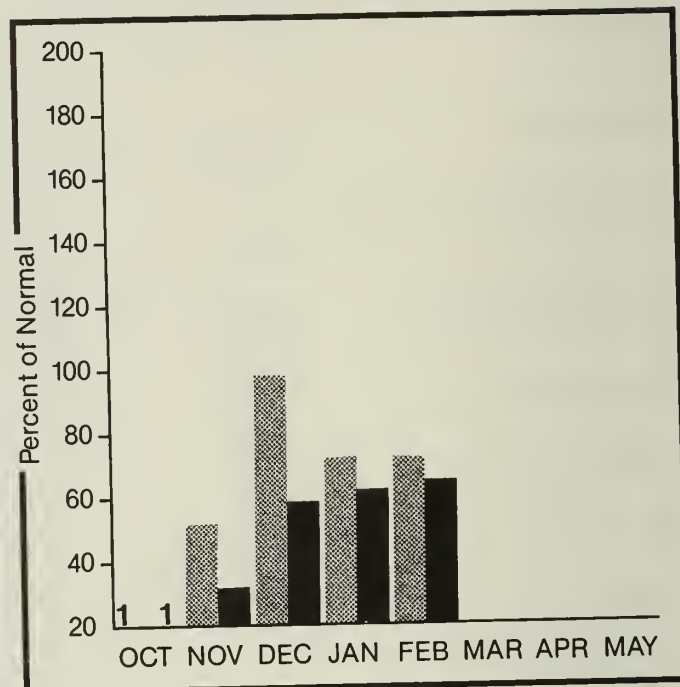
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK†

Snow accumulation during February was near normal over much of the headwater areas of the Clearwater and Lemhi River drainages, resulting in improvement in the snowpack conditions. Snowpacks, however, remain below to well below normal ranging from 68% of average on the Salmon above Salmon and the N. Fk. Clearwater to 81% on the Selway. Apr-July streamflow projections remain about the same on the Clearwater and have been reduced on the Salmon. Apr-July forecasts remain well below normal, ranging from 59% of average on the Salmon at Whitebird to 66% on the Clearwater at Spalding. Soil profiles remain very dry and are expected to absorb above normal amounts of snowmelt water. Dworshak Reservoir is currently at only 53% of capacity and is not expected to fill to capacity.

CLEARWATER AND SALMON RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
CLEARWATER at Orofino	APR-SEP	5163.0	3350.0	65	5060.0	98	1750.0	34
	APR-JUL	4889.0	3220.0	66	4800.0	98	1660.0	34
CLEARWATER at Spalding	APR-SEP	8378.0	5530.0	66	8000.0	95	3000.0	36
	APR-JUL	7916.0	5120.0	65	7500.0	95	2700.0	34
DWORSHAK RESERVOIR inflow	APR-SEP	3010.0	1770.0	59	2760.0	92	780.0	26
	APR-JUL	2822.0	1670.0	59	2600.0	92	740.0	26
SALMON at Whitebird	APR-SEP	7007.0	4150.0	59	6180.0	88	2240.0	32
	APR-JUL	6322.0	3800.0	60	5560.0	88	2000.0	32
SALMON at Salmon	APR-SEP	1077.0	650.0	60	1070.0	99	260.0	24
	APR-JUL	919.0	565.0	61	910.0	99	220.0	24

RESERVOIR STORAGE					(1000AF)	WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF		
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE	
DWORSHAK	3467.8	1835.2	2492.0	2084.1	North Fork Clearwater	13	104	68	
					Lochsa River	4	121	79	
					Selway River	5	121	81	
					Clearwater River	19	110	72	
					Salmon River ab Salmon	13	119	68	
					Lemhi River	8	105	80	
					Salmon River Total	34	116	69	

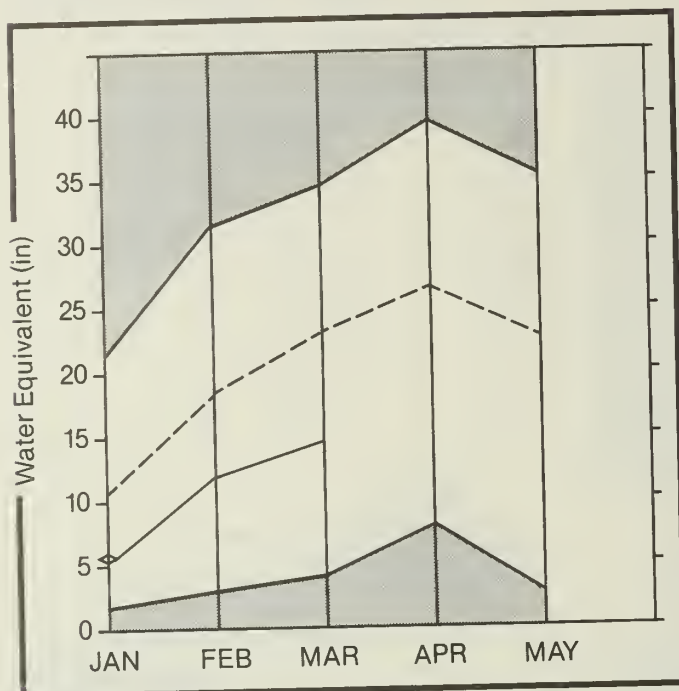
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

Weiser, Payette, and Boise River Basin

Mountain snowpack* (inches)



*Based on selected stations

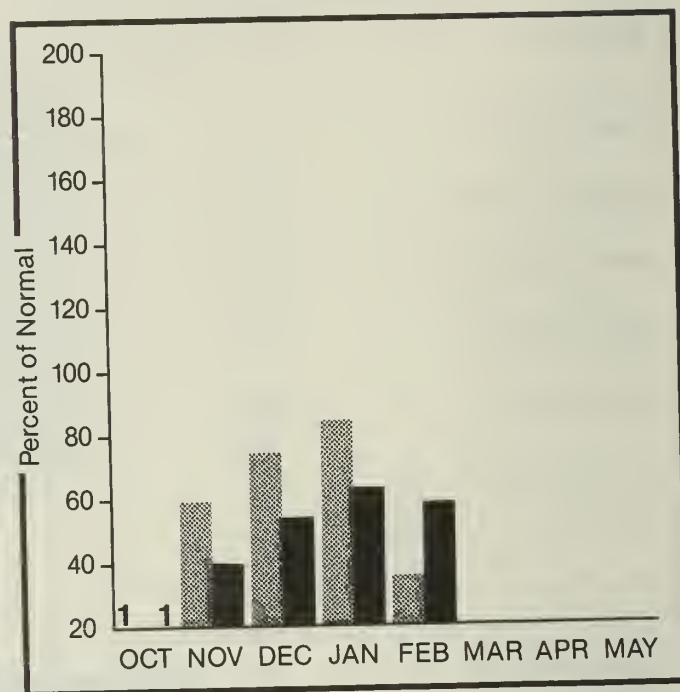
Maximum

Average

Minimum

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

March 1 snow surveys show little or no change in the snowpack conditions over the past month. Snowpacks remain well below normal throughout the basin, ranging from 61 to 68% of average. Soil profiles are also very dry and are expected to absorb above normal amounts of snowmelt water. Apr-July seasonal streamflow forecasts have again been reduced and now range from 51% of average on the Weiser nr Weiser to 64% on the inflow to Deadwood Reservoir. Reservoir storage levels also remain well below normal with most reservoirs reporting between 41 and 67% of normal storage volumes. The Boise Reservoir system is not expected to fill and filling of Cascade Reservoir is questionable at this time. Water is expected to be in very short supply on the Weiser and Boise River systems. The amount and timing of spring and early summer precipitation will be critical factors in determining the available water supply. Water users should keep in touch with their local irrigation district for estimates of the supply available to them.

WEISER, PAYETTE AND BOISE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
WEISER nr Weiser	APR-SEP	444.0	225.0	51	460.0	104	45.0	10
	APR-JUL	414.0	215.0	52	425.0	103	40.0	10
PAYETTE RIVER at Horseshoe Bend	APR-SEP	1862.0	1120.0	60	1600.0	86	635.0	34
	APR-JUL	1717.0	1030.0	60	1480.0	86	580.0	34
NF PAYETTE RIVER at Cascade 2	APR-SEP	568.0	340.0	60	475.0	84	205.0	36
	APR-JUL	531.0	320.0	60	445.0	84	190.0	36
NF PAYETTE RIVER nr Banks 2	APR-SEP	737.0	440.0	60	615.0	83	260.0	35
	APR-JUL	691.0	415.0	60	580.0	84	250.0	36
SF PAYETTE RIVER at Lowman	APR-SEP	516.0	320.0	62	425.0	82	210.0	41
	APR-JUL	458.0	285.0	62	380.0	83	190.0	41
DEADWOOD RESERVOIR inflow	APR-JUL	143.0	91.0	64	123.0	86	58.0	41
BOISE RIVER nr Twin Springs 1	APR-SEP	722.0	435.0	60	585.0	81	290.0	40
	APR-JUL	664.0	400.0	60	540.0	81	265.0	40
SF BOISE at Anderson Dam 1	APR-SEP	619.0	340.0	55	455.0	74	220.0	36
	APR-JUL	578.0	320.0	55	430.0	74	210.0	36
BOISE RIVER nr Boise 1	APR-SEP	1628.0	985.0	61	1200.0	74	590.0	36
	APR-JUL	1508.0	895.0	59	1300.0	86	470.0	31
	APR-JUN	1334.0	800.0	60	1160.0	87	430.0	32

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE THIS YEAR	LAST YEAR	** AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE	
MANN CREEK	11.3	2.8	4.4	6.8	Mann Creek	5	100	61
CASCADE	703.2	363.1	471.3	393.8	Weiser River	9	101	61
DEADWOOD	162.0	67.7	91.8	84.5	North Fork Payette	10	106	66
ANDERSON RANCH	464.2	123.1	369.7	282.1	South Fork Payette	7	118	63
ARROWROCK	286.6	156.6	233.4	234.8	Payette River Total	16	110	64
LUCKY PEAK	307.0	116.3	81.4	122.5	Middle & North Fork Boise	9	131	65
LAKE LOWELL (DEER FLAT)	177.0	88.9	156.5	140.6	South Fork Boise River	11	135	64
					Boise River Total	20	128	64
					Canyon Creek	3	122	68

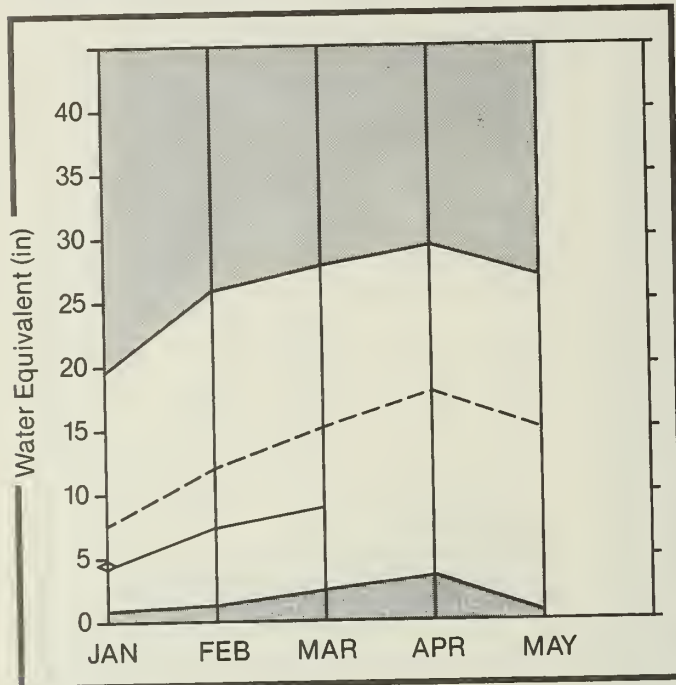
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2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

Big Wood, Little Wood, Big Lost, and Little Lost River Basin

Mountain snowpack* (inches)



*Based on selected stations

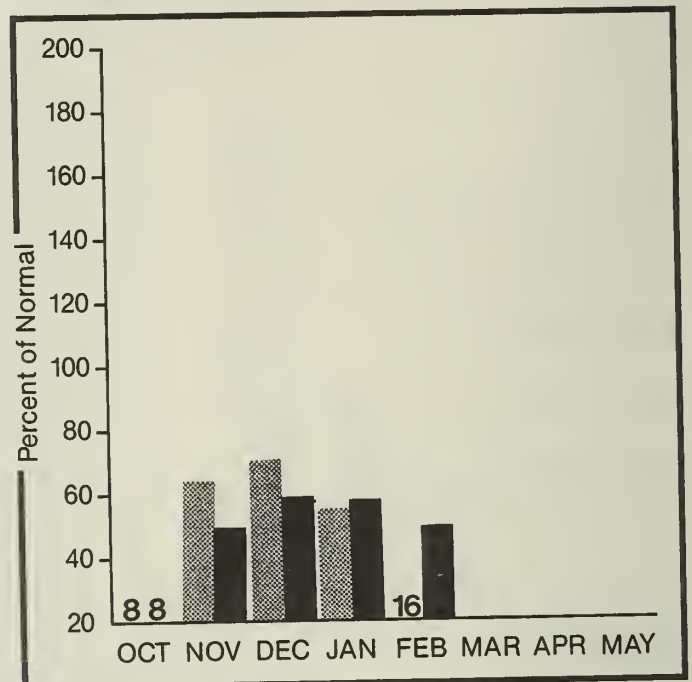
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

Snowpack conditions in this basin show a decline in comparison to normal during February. Snowpacks are well below normal, ranging from only 51 to 62% of average on all basins except the Little Lost which reports 77% of normal snow accumulation. Soil moisture conditions are very dry and will absorb above normal amounts of snowmelt water this spring. Apr-July streamflows are forecast to be better than last year but well below normal, ranging from only 50% of normal on Magic Reservoir inflow to 67% on the Little Lost below Wet Creek. Reservoir levels are also very low, ranging from only 23% of normal (12% of capacity) on Magic Reservoir to 83% of average (49% of capacity) in Little Wood Reservoir. Magic Reservoir is not expected to fill and marginal water supplies are expected on most basins, particularly on the Big Wood system. The amount and timing of spring precipitation will be important factors in determining the available water supply. Water users should keep in touch with their local irrigation district for estimates of the supply available to them.

BIG WOOD, LITTLE WOOD, BIG LOST AND LITTLE LOST RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BIG WOOD nr Bellevue	APR-SEP	217.0	117.0	54	170.0	78	60.0	28
	APR-JUL	202.0	111.0	55	160.0	79	55.0	27
MAGIC RESERVOIR inflow	APR-SEP	338.0	169.0	50	360.0	107	70.0	21
	APR-JUL	322.0	161.0	50	345.0	107	65.0	20
LITTLE WOOD nr Carey	APR-SEP	107.0	54.0	50	85.0	79	25.0	23
	APR-JUL	99.0	50.0	51	78.0	79	22.0	22
BIG LOST at Howell Ranch	APR-SEP	219.0	140.0	64	200.0	91	65.0	30
	APR-JUL	192.0	123.0	64	180.0	94	55.0	29
	APR-JUN	148.0	95.0	64	140.0	95	45.0	30
BIG LOST nr Mackay 2	APR-SEP	195.0	120.0	62	190.0	97	50.0	26
LITTLE LOST bl Wet Ck	APR-SEP	38.8	26.0	67	40.0	103	12.0	31
	APR-JUL	31.4	21.0	67	33.0	105	10.0	32
LITTLE LOST nr Howe	APR-SEP	44.0	29.0	66	45.0	102	10.0	23
	APR-JUL	33.0	22.0	67	34.0	103	9.0	27

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE 1 CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
MAGIC	191.5	23.6	119.7	102.4	Big Wood ab Magic	10	131 58
LITTLE WOOD	30.0	14.6	23.6	17.6	Camas Creek	6	122 60
CAREY VALLEY		NO REPORT			Big Wood Total	15	126 58
MACKAY	44.5	26.7	35.9	32.6	Little Wood River	4	139 55
					Fish Creek	3	125 51
					Big Lost River	9	132 62
					Little Lost River	4	149 77

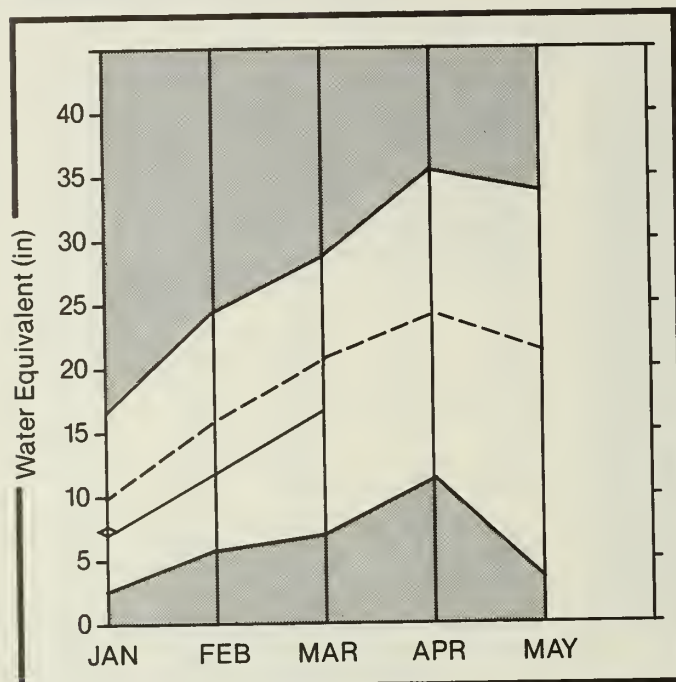
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2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

Willow Creek, Blackfoot, Upper Snake, and Portneuf River Basin

Mountain snowpack* (inches)



*Based on selected stations

Maximum



Average



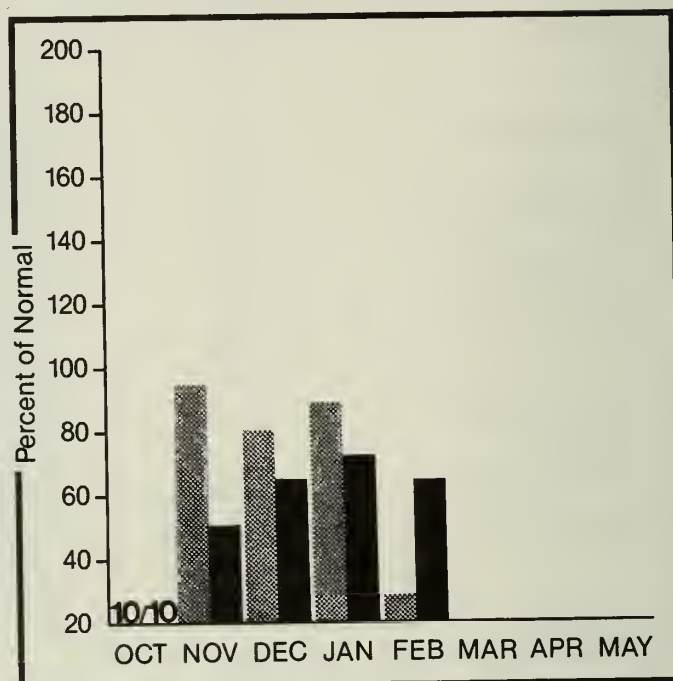
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Snowpack conditions show a slight improvement in comparison to normal over those reported last month, but remain below to well below average for March 1. Currently, basin snowpacks range from 61% on the Beaver-Camas Creek drainage near Dubois to 86% on the Snake mainstem above Jackson, Wyoming. Apr-July seasonal volume streamflows are forecast to be below to well below normal ranging from 69% on the Portneuf at Topaz to 80% on the Snake at Moran. Reservoir carryover storage is reported to be good with most major reservoirs reporting near to slightly above normal storage volumes. Palisades Reservoir reports the lowest storage level at 81% of average storage. In general, water supplies are expected to be adequate to meet most user needs on the Snake mainstem. Some minor shortages may occur on the lower elevation basins of the Portneuf and Blackfoot. The amount and timing of spring and early summer precipitation will play an important role in determining the available water supply in these basins.

WILLOW CREEK, BLACKFOOT, UPPER SNAKE AND PORTNEUF RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
HENRY'S FORK nr Ashton 2	APR-SEP	746.0	535.0	72	610.0	82	460.0	62
	APR-JUL	557.0	400.0	72	455.0	82	345.0	62
HENRYS FORK nr Rexburg 2	APR-SEP	1595.0	1120.0	70	1370.0	86	765.0	48
	APR-JUL	1260.0	880.0	70	1080.0	86	605.0	48
FALLS RIVER nr Squirrel	APR-JUL	373.0	275.0	74	345.0	92	205.0	55
TETON RIVER ab S Leigh Ck	APR-SEP	194.0	147.0	76	175.0	90	120.0	62
	APR-JUL	145.0	110.0	76	130.0	90	90.0	62
TETON nr St. Anthony	APR-SEP	479.0	365.0	76	425.0	89	295.0	62
	APR-JUL	387.0	295.0	76	350.0	90	240.0	62
SNAKE at Moran 1	APR-SEP	888.0	710.0	80	835.0	94	575.0	65
PALISADES LAKE inflow 1	APR-SEP	3852.0	2850.0	74	3700.0	96	1950.0	51
SNAKE nr Heise 2	APR-SEP	4142.0	3070.0	74	4000.0	97	2100.0	51
	APR-JUL	3524.0	2610.0	74	3400.0	96	1800.0	51
SNAKE nr Blackfoot 2	APR-SEP	5680.0	4090.0	72	5200.0	92	3000.0	53
	APR-JUL	4589.0	3320.0	72	4200.0	92	2400.0	52
PORTNEUF at Topaz	MAR-SEP	109.0	75.0	69	110.0	101	35.0	32
	MAR-JUL	88.0	62.0	70	95.0	108	30.0	34

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE THIS YEAR	LAST YEAR	** AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
ISLAND PARK	127.6	118.2	123.0	110.1	Camas-Beaver Creeks	4	128 62
GRASSY LAKE	15.2	9.2	13.0	10.9	Henry's Fork River	12	137 76
JACKSON LAKE	624.4	96.1	91.0	535.9	Teton River	9	123 80
PALISADES	1200.0	835.3	1257.2	1028.0	Snake above Palisades	33	118 78
AMERICAN FALLS	1700.0	1350.9	1385.8	1277.2	Snake above Jackson Lake	9	150 86
BROWNLEE	975.3	601.1	619.2	531.0	Gros Ventre River	3	86 74
BLACKFOOT	348.7	251.1	---	242.1	Greys River	5	120 75
HENRY'S LAKE	90.4	78.1	75.8	79.4	Salt River	6	110 68
RIRIE	96.5	49.8	50.0	51.3	Willow Creek	11	106 72
					Blackfoot River	8	114 71
					Portneuf River	11	115 67
					Toponce Creek	3	113 63

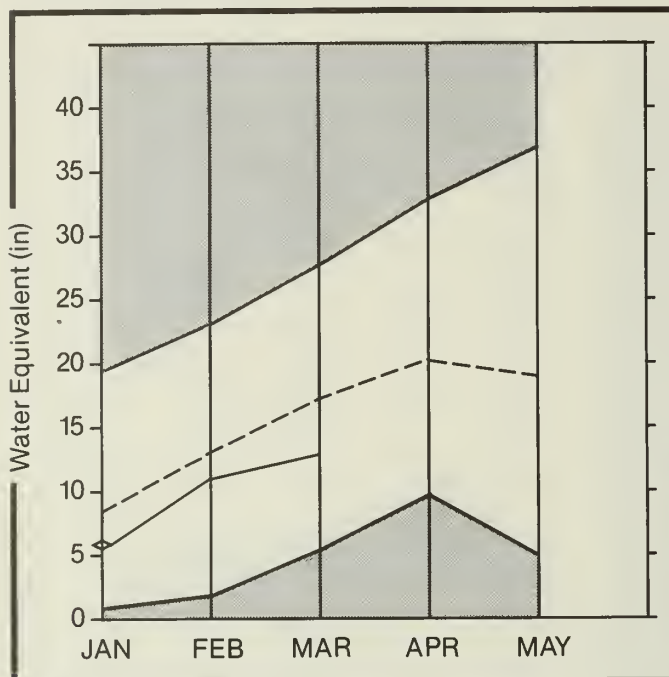
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Southside Snake River Basin

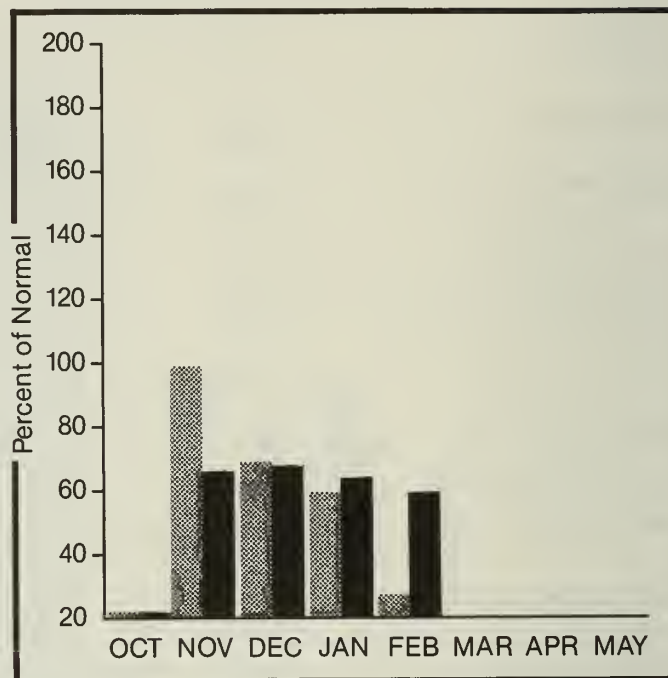
Mountain snowpack* (inches)



*Based on selected stations

Maximum ——— Average - - - -
Minimum ——— Current ———

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation [hatched bar] Year to date precipitation [solid black bar]

WATER SUPPLY OUTLOOK:

March 1 snowpack conditions show little change in comparison to normal from those reported on February 1. Basin snowpacks remain below to well below normal, ranging from 64 to 79% of average. March-July and Apr-July seasonal volume streamflows are expected to be well below normal, ranging from 54% on the Owyhee Lake inflow to 67% on the Salmon Falls Cr. nr Jacinto. Reservoir storages are also very low, ranging from only 43% of average (17% of capacity) in Oakley Reservoir to 71% of average (21% of capacity) in Salmon Falls. Owyhee Reservoir is 49% of average and 30% of capacity. Soils are dry under the snowpack and are expected to absorb above normal amounts of snowmelt water. Water supplies are expected to be marginal in most basins. The amount of spring and early summer precipitation will be important factors in determining the amount of water available.

SOUTHSIDE SNAKE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
OAKLEY RESERVOIR inflow	APR-SEP	33.0	19.3	59	32.0	97	7.0	21
	APR-JUL	29.7	17.8	60	29.0	98	7.0	24
SALMON FALLS CK nr San Jacinto	MAR-SEP	102.0	68.0	67	109.0	107	27.0	26
	MAR-JUL	97.0	66.0	68	105.0	108	27.0	28
	MAR-JUN	91.0	62.0	68	98.0	108	26.0	29
BRUNEAU nr Hot Spring	MAR-SEP	260.0	169.0	65	270.0	104	70.0	27
	MAR-JUL	249.0	161.0	65	255.0	103	65.0	26
OWYHEE RIVER nr Gold Creek 2	APR-JUL	27.8	16.6	60	33.0	119	2.0	7
OWYHEE RIVER nr Owyhee 2	APR-JUL	86.0	47.0	55	93.0	108	4.0	5
OWYHEE LAKE inflow 1	APR-SEP	455.0	245.0	54	575.0	126	50.0	11
	APR-JUL	427.0	235.0	55	545.0	128	90.0	21
OWYHEE at Rome 2	APR-JUL	376.0	200.0	53	385.0	102	40.0	11

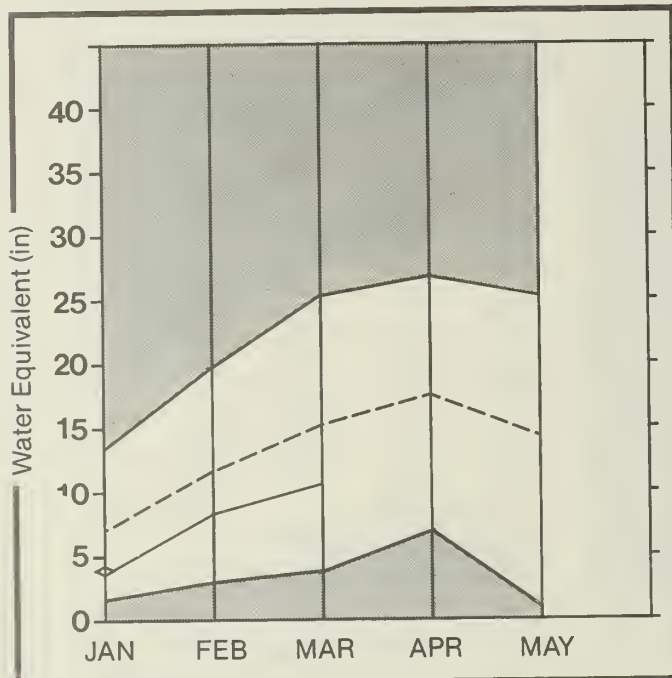
RESERVOIR STORAGE					(1000AF)	WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF		
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE	
OAKLEY	77.4	12.9	30.8	29.9	Raft River	9	106	66	
SALMON FALLS	182.6	38.8	94.9	53.9	Goose-Trapper Creeks	5	118	64	
OWYHEE	715.0	219.4	519.2	486.6	Salmon Falls Creek	12	117	72	
					Bruneau River	13	119	73	
					Owyhee River	30	90	64	

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

Great Basin

Mountain snowpack* (inches)

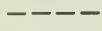


*Based on selected stations

Maximum



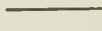
Average



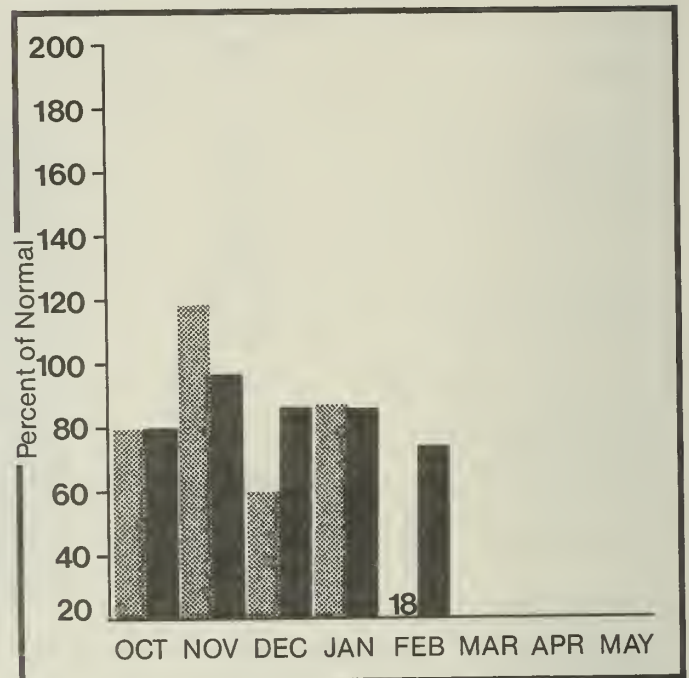
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Snowpack conditions remain below normal for March 1, ranging from 58% of average on the Malad drainage to 76% of the Montpelier Creek drainage. Apr-July water supply forecasts currently range from 50% on the Bear at Harer to 75% on Montpelier Creek near Montpelier. Bear Lake reports near normal storage for March 1 at 104% of average, while Montpelier Creek Reservoir reports 71% of normal storage. Soil moisture conditions in this basin are near average and water supplies are expected to be adequate to meet most user needs providing normal precipitation occurs through the spring and early summer.

For more information contact your local Soil Conservation Service office.

GREAT BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BEAR at Harer	APR-SEP	310.0	155.0	50	305.0	98	60.0	19
MONTPELIER CK nr Montpelier	APR-SEP	13.9	10.5	75	16.0	115	5.0	36
CUB RIVER nr Preston	APR-SEP	51.8	35.0	68	51.0	99	19.0	37
	APR-JUL	46.8	32.0	68	46.0	98	18.0	38

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE THIS YEAR	** USEABLE STORAGE LAST YEAR	** AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE	
BEAR LAKE	1421.0	1036.2	1051.5	992.5	Bear River (above Harer)	11	110	69
MONTPELIER CREEK	3.4	1.2	2.2	1.7	Montpelier Creek	7	142	76
					Mink Creek	6	130	69
					Cub River	4	121	67
					Malad River	7	140	57

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

SNOW DATA MEASUREMENTS

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
UPPER COLUMBIA BASIN							WATERSHED I						
ABOVE BURKE	4100	2/25/88	40	12.4	10.4	19.0	MOUNTAIN MEADOWS	6360	3/01/88	---	14.1E	10.6	20.8
ABOVE ROLAND	4350	3/01/88	---	15.3E	---	27.0	MOUNTAIN MDWS PILLW	6360	3/01/88	---	16.3	12.6	23.2
BEAR MOUNTAIN	5400	2/23/88	87	32.6	31.9	53.0	NEZ PERCE PASS	6570	2/27/88	---	13.6	9.0	15.0
BEAR MTN PILLW	5400	3/01/88	---	30.4	41.5	53.8	PERREAU MEADOWS	8500	3/01/88	33	9.4	8.3	14.8
BENTON MEADOW	2370	2/26/88	12	4.0	2.8	6.0	PIERCE R.S.	3080	2/26/88	22	7.4	7.0	10.0
BENTON SPRING	4920	2/26/88	34	10.4	13.3	17.2	REDFISH LAKE FLAT	6560	3/01/88	27	6.8	5.9	10.7
BREEZY SADDLE	5010	2/25/88	63	19.6	18.1	27.7	ROCK FLAT SUMMIT	5310	2/28/88	37	10.4	11.6	16.6
CHILCO RIDGE	3650	2/29/88	7	2.7	3.0	6.2	SADDLE MOUNTAIN	7940	2/26/88	52	16.8	13.4	22.0
CONIE RIDGE	3900	2/29/88	9	3.3	4.2	7.4	SAVAGE PASS	6170	3/02/88	53	18.6	15.0	23.3
COPPER RIDGE	4820	2/26/88	44	15.5	19.6	23.8	SAVAGE PASS PILLW	6170	3/01/88	---	18.7	15.2	24.6
CORNER CREEK	3150	2/29/88	19	6.2	6.9	6.6	SCHWARTZ LAKE	8540	2/24/88	31	8.9	8.5	10.5
EAST RAGGED SADDLE	3740	2/28/88	40	13.9	14.4	18.0	SECESH SUMMIT	6520	2/27/88	60	21.0	16.8	30.8
EAST TWIN	4130	2/29/88	16	5.7	7.3	9.9	SECESH SUMMIT PILLW	6520	3/01/88	---	21.0	15.6	31.2
FORTY-NINE MEADOWS	4830	2/25/88	63	19.1	17.1	26.3	SHANGHAI SUMMIT	4570	2/25/88	47	14.4	16.1	23.4
FOURTH OF JULY SUM	3200	2/25/88	20	6.2	6.2	8.2	SHANGHAI SUM PILLW	4570	3/01/88	---	15.3	17.1	24.8
HUMBOLDT GULCH	4250	2/25/88	35	10.4	8.5	14.2	SHERWIN	3200	3/01/88	25	8.3	8.5	12.3
HUMBOLDT GLCH PILLW	4250	3/01/88	---	7.6	8.4	13.2	SHERWIN PILLW	3200	3/01/88	---	7.5	6.7	11.5
KELLOGG PEAK AM	5560	3/01/88	---	18.2E	16.9	27.3	SQUAW MEADOW	5900	2/27/88	60	21.2	18.8	31.4
LOOKOUT	5140	2/25/88	61	18.4	20.5	29.5	TWIN LAKES	6510	2/24/88	86	28.1	28.2	36.5
LOOKOUT PILLW	5140	3/01/88	---	17.7	20.7	28.4	TWIN PEAKS	9190	2/27/88	48	14.8	12.2	21.0
LOST LAKE	6110	2/25/88	90	30.1	33.1	48.9	VIENNA MINE	8960	2/26/88	60	19.9	15.0	31.2
LOST LAKE PILLW	6110	3/01/88	---	31.3	41.8	55.0	VIENNA MINE PILLW	8960	3/01/88	---	20.2	14.7	31.1
LOWER SANDS CREEK	3120	2/26/88	40	13.3	14.2	16.8	WEBB CREEK	4720	2/26/88	18	5.7	7.7	8.8
MOSQUITO RIDGE	5200	2/27/88	66	21.9	22.9	33.7	WEST BRANCH	5560	2/29/88	41	13.5	14.2	22.9
MOSQUITO PILLW	5200	3/01/88	---	20.4	22.8	34.0	WEST BRANCH PILLW	5560	3/01/88	---	13.7	13.5	23.0
ROLAND SUMMIT	5120	2/27/88	58	15.3	22.3	32.8							
SAGE CREEK SADDLE	4080	2/29/88	29	9.5	11.2	16.1							
SCHWEITZER BASIN	6090	2/25/88	84	31.1	30.9	40.4							
SCHWEITZER BN PILLW	6090	3/01/88	---	33.7	33.4	42.4							
SCHWEITZER BOWL	4800	2/25/88	50	18.3	18.5	27.2							
SCHWEITZER RIDGE	6200	2/25/88	76	28.5	34.7	40.1							
SHERWIN	3200	3/01/88	25	8.3	8.5	12.3							
SHERWIN PILLW	3200	3/01/88	---	7.5	6.7	11.5							
SKITWISH RIDGE	5110	2/26/88	56	18.9	21.9	30.2							
SUNSET	5540	3/01/88	70	17.0	19.4	28.1							
SUNSET PILLW	5540	3/01/88	---	18.0	22.6	30.8							
TWIN SPIRIT DIVIDE	3480	2/27/88	30	8.7	10.0	12.2							
WEST TWIN	4220	2/29/88	9	3.7	7.3	8.8							
CLEARWATER AND SALMON BASINS							WATERSHED II						
ABOVE GILMORE	8200	2/29/88	28	6.6	5.6	7.8							
ASPEN-HALL PASS AM	8200	2/29/88	28	6.3	6.7	8.5							
BANNER SUMMIT	7040	2/26/88	49	15.8	13.5	25.8							
BANNER SUMMIT PILLW	7040	3/01/88	---	15.6	12.9	23.2							
BEAR BASIN	5350	2/29/88	37	11.5	12.8	17.6							
BEAR BASIN PILLW	5350	3/01/88	---	10.6	9.6	17.6							
BIG CREEK SUMMIT	6580	2/27/88	64	21.7	19.9	31.5							
BIG CREEK SUM PILLW	6580	3/01/88	---	18.3	16.9	28.0							
BORAH	6200	2/27/88	12	3.3	3.6	4.9							
BOULDER CREEK	5440	2/29/88	35	12.1	11.0	21.1							
BREEZY SADDLE	5010	2/25/88	63	19.6	18.1	27.7							
BRUNDAGE MOUNTAIN	7560	3/01/88	---	27.1E	22.1	40.1							
BRUNO CREEK	7920	3/02/88	42	11.7	9.7	16.7							
CAYUSE AIRSTRIP	3500	2/25/88	27	8.1	6.8	11.2							
COOL CREEK	6250	2/25/88	96	30.2	27.9	42.6							
COOL CREEK PILLW	6280	3/01/88	---	29.6	28.3	40.1							
COPE'S CAMP	7520	2/24/88	24	6.6	4.7	6.5							
CRATER MEADOWS	5960	2/25/88	83	27.2	24.8	38.0							
CRATER MDWS PILLW	5960	3/01/88	---	27.9	26.2	40.0							
CROOKED FORK	3610	3/02/88	33	10.8	7.8	11.9							
DEADWOOD SUMMIT	6860	2/26/88	73	26.9	21.6	40.2							
DEADWOOD SUM PILLW	6860	3/01/88	---	26.5	20.0	44.4							
DOUBLE SPGS PASS AM	8380	2/26/88	32	7.8	6.2	8.7							
ELK BUTTE	5550	2/25/88	63	20.3	18.8	33.1							
ELK BUTTE PILLW	5550	3/01/88	---	21.4	22.6	37.2							
FISH LAKE AIRSTRIP	5650	2/25/88	87	28.6	23.6	34.7							
FORTY-NINE MEADOWS	4830	2/25/88	63	19.1	17.1	26.3							
GALENA SUMMIT	8780	2/26/88	40	12.1	9.3	20.2							
GALENA SUMMIT PILLW	8780	3/01/88	---	11.6	8.6	16.2							
GIBBONS PASS	7100	2/26/88	48	15.6	11.6	20.5							
HEMLOCK BUTTE	5810	2/25/88	86	27.5	27.0	42.7							
HEMLOCK BUTTE PILLW	5810	3/01/88	---	26.9	27.8	42.8							
HOODOO BASIN	6050	2/28/88	89	33.0	31.8	43.9							
HOODOO CREEK	5900	2/28/88	80	28.9	27.4	40.7							
KIT CARSON PASTURE	4950	2/27/88	29	8.4	5.6	7.8							
LEATHERMAN PASS	9860	2/27/88	48	14.8	16.2	19.7							
LEMHI PASS	7480	2/25/88	26	6.3	7.2	7.7							
LEMHI RIDGE	8100	2/25/88	28	7.0	8.2	8.7							
LOLO PASS	5240	3/02/88	54	18.2	16.8	26.6							
LOLO PASS PILLW	5240	3/01/88	---	20.3	18.2	28.8							
LOST LAKE	6110	2/25/88	90	30.1	33.1	48.9							
LOST LAKE PILLW	6110	3/01/88	---	31.3	41.8	55.0							
MEADOW LAKE	9150	2/29/88	39	11.8	9.6	15.1							
MILL CREEK SUMMIT	8800	2/26/88	42	13.0	11.2	19.3							
MILL CREEK ST PILLW	8800	3/01/88	---	12.2	---	17.8							
MOONSHINE	7440	2/25/88	29	6.6	4.2	9.0							
MOONSHINE PILLW	7440	3/01/88	---	7.4	5.3	9.4							
MOOSE CREEK	6200	3/01/88	37	11.6	6.8	15.2							
MOOSE CR PILLW	6200	3/01/88	---	12.0	8.5	15.1							
MORGAN CREEK	7600	2/26/88	35	9.3	6.4	12.2							
MORGAN CREEK PILLW	7600	3/01/88	---	8.5	6.9	11.8							
MORSE CREEK SAWMILL	7120	2/27/88	24	5.0	5.2	8.4							
							ATLANTA SUMMIT	7600	2/25/88	61	19.8	14.1	30.2
							ATLANTA SUM PILLW	7580	3/01/88	---	18.1	14.2	27.4
							ATLANTA TOWNSITE	5370	2/26/88	29	6.9	6.8	---
							BANNER SUMMIT	7040	2/26/88	49	15.8	13.5	25.8
							BANNER SUMMIT PILLW	7040	3/01/88	---	15.6	12.9	23.2
							BAD BEAR	4940	2/29/88	26	8.2	7.4	13.1
							BEAR BASIN	5350	2/29/88	37	11.5	12.8	17.6
							BEAR BASIN PILLW	5350	3/01/88	---	10.6	9.6	17.6
							BEAR SADDLE	6180	2/27/88	41	13.6	13.8	27.9
							BEAR SADDLE PILLW	6180	3/01/88	---	13.5	13.1	27.8
							BENNETT MOUNTAIN	6560	2/23/88	34	9.9E	7.8	15.2
							BENNETT MTN PILLW	6560	3/01/88	---	8.4	9.2	16.4
							BIG CREEK SUMMIT	6580	2/27/88	64	21.7	19.9	31.5
							BIG CREEK SUM PILLW	6580	3/01/88	---	18.3	16.9	28.0
							BOGUS BASIN	6340	3/01/88	38	12.8	11.7	20.9
							BOGUS BASIN ROAD	5540	3/01/88	6	1.9	2.7	5.8
							BOULDER CREEK	5440	2/29/88	35	12.1	11.0	21.1
							BRUNDAGE MOUNTAIN	7560	3/01/88	---	27.1E	22.1	40.1
							BRUNDAGE RESV PILLW	4500	3/01/88	---	14.4	13.8	---
							CAMAS CREEK DIVIDE	5710	2/25/88	18	6.9	5.8	10.6
							CHIMNEY CREEK	6400	2/25/88	28	8.0	7.4	13.9
							COUCH SUMMIT	6840	2/25/88	34	8.1	6.4	16.7
							COZY COVE	5380	2/26/88	27	7.8	7.9	14.8
							COZY COVE PILLW	5380	3/01/88	---	10.5	9.2	22.4
							CRAWFORD R.S.	4860	2/27/88	14	4.3	2.6	7.4
							DEADMAN GULCH	5600	2/26/88	39	12.3	9.4	15.1
							DEADWOOD AIRSTRIP	5360	3/01/88	---	8.0E	8.2	14.3
							DEADWOOD SUMMIT	6860	2/26/88	73	2		

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
BIG WOOD, LITTLE WOOD, BIG LOST AND LITTLE LOST BASINS							WATERSHEO IV						
BEAR CANYON	7900	2/25/88	35	9.4	6.6	15.4	PACKSADOLE SPRING	8200	2/29/88	54	19.7	14.8	24.7
BEAR CANYON PILLOW	7900	3/01/88	---	9.1	5.5	13.9	PEBBLE CREEK	6550	2/27/88	32	9.1	7.8	14.4
BENNETT MOUNTAIN	6560	2/23/88	34	9.9E	7.8	15.2	PHILLIPS BENCH	8200	2/25/88	62	19.7	18.9	25.5
BENNETT MTN PILLOW	6560	3/01/88	---	8.4	9.2	16.4	PHILLIPS BENCH PILL.	8200	3/01/88	---	17.6	15.9	23.7
CAMAS CREEK DIVIDE	5710	2/25/88	18	6.9	5.8	10.6	PINE CREEK PASS	6810	2/29/88	40	13.2	9.0	15.4
CHIMNEY CREEK	6400	2/25/88	28	8.0	7.4	13.9	PUTNAM	7220	2/27/88	38	8.5	10.8	18.5
COPPER BASIN	7640	2/25/88	15	3.9	2.4	8.1	SAWTELL MOUNTAIN	8720	3/01/88	62	22.7	16.0	28.8
COUCH SUMMIT	6840	2/25/88	34	8.1	6.4	16.7	SEDEGWICK PEAK	7850	2/27/88	34	10.4	8.6	16.0
DOLLARHIDE SUMMIT	8420	2/25/88	44	13.1	9.3	20.9	SHEEP MOUNTAIN	6570	2/29/88	28	8.4	7.2	12.0
DOLLARHIDE SH PILLOW	8420	3/01/88	---	13.4	10.3	21.3	SHEEP MTN PILLOW	6570	3/01/88	---	9.2	7.9	13.8
DRY FORK	7220	2/24/88	30	8.0	5.1	14.4	SLUG CREEK DIVIOE	7230	2/26/88	33	9.8	7.8	14.7
FISHPOLE LAKE	9300	2/25/88	39	12.3	7.3	17.0	SLUG CK DVD PILLOW	7230	3/01/88	---	10.9	8.6	16.7
GALENA	7440	3/01/88	---	8.8E	7.3	16.6	SOMSEN RANCH	6840	2/24/88	34	9.7	8.3	12.9
GALENA PILLOW	7440	3/01/88	---	10.1	7.8	16.4	SOMSEN RANCH PILLOW	6800	3/01/88	---	7.6	7.3	12.4
GALENA NEW	7470	2/26/88	36	9.5	7.7	18.3	STATE LINE	6660	2/29/88	37	11.1	8.9	12.7
GALENA SUMMIT	8780	2/26/88	40	12.1	9.3	20.2	SULPHUR PEAK	7070	2/24/88	34	10.1	8.2	14.2
GALENA SUMMIT PILLOW	8780	3/01/88	---	11.6	8.6	16.2	TARGHEE PASS	6980	3/01/88	---	8.5E	7.3	12.9
GARFIELD R.S.	6560	2/29/88	16	4.9	3.2	9.9	TETON PASS W.S.	7740	2/25/88	53	17.0	17.9	22.4
GARFIELD R.S. PILLOW	6560	3/01/88	---	5.5	3.5	9.9	TEX CREEK	6650	3/01/88	---	6.1E	5.3	8.6
GRAHAM RANCH	6270	2/26/88	26	5.7	5.1	12.6	TOPONCE	6160	2/27/88	34	11.6	7.4	14.6
HILTS CREEK	8000	2/26/88	29	6.6	5.7	9.4	TWITCHELL CANYON	6300	3/01/88	34	11.2	10.7	14.4
HILTS CREEK PILLOW	8000	3/01/88	---	9.7	5.8	11.3	VALLEY VIEW	6680	3/01/88	30	9.4	8.0	14.8
HYNDMAN CREEK	7440	2/25/88	30	7.7	5.3	12.7	WEBBER CREEK	6700	2/25/88	18	3.8	3.2	4.8
HYNDMAN PILLOW	7440	3/01/88	---	8.3	4.8	11.4	WHISKEY CREEK	6800	2/26/88	48	11.6	10.4	17.7
IRON BOG	7650	2/24/88	29	7.3	4.5	12.4	WHITE ELEPHANT	7710	3/01/88	48	15.9	10.5	21.5
IRON MINE CREEK	6300	2/29/88	18	5.0	4.8	10.1	WHITE ELEPHANT PILL	7710	3/01/88	---	17.2	12.5	22.6
LEADBELT	6700	2/24/88	17	3.8	4.4	8.5	WILDHORSE DIVIDE	6490	2/27/88	31	9.1	9.5	15.0
LEATHERMAN PASS	9860	2/27/88	48	14.8	16.2	19.7	WILDHORSE DVD PILLOW	6490	3/01/88	---	9.0	8.9	14.2
LITTLE CAMAS FLAT	4940	2/23/88	10	5.1	4.4	6.2	WOOD CANYON DIVIOE	7450	2/24/88	36	10.3	8.9	16.4
LOST-WOOD DIVIDE	7900	2/25/88	45	13.4	8.2	19.8							
LOST-WOOD DVD PILLOW	7900	3/01/88	---	12.6	8.1	20.5							
MASCOT MINE	7780	2/25/88	26	6.2	4.1	12.9	SOUTHSIOE SNAKE BASIN						
MOONSHINE	7440	2/25/88	29	6.6	4.2	9.0	WATERSHED VI						
MOONSHINE PILLOW	7440	3/01/88	---	7.4	5.3	9.4	ANTELOPE RIOGE	6180	2/28/88	9	3.3	4.4	6.8
MOUNT BALOY	8920	2/25/88	38	10.7	10.2	18.1	BADGER GULCH	6660	2/23/88	28	7.8	6.0	11.3
MULDON	6320	2/29/88	13	3.7	3.2	7.4	BATTLE CREEK	5720	3/07/88	1	.1	2.2	3.4
SAWHILL CANYON	7000	2/25/88	26	5.2	3.8	7.0	BEAR CREEK	7800	2/25/88	44	13.2	10.7	18.2
SOLDIER R.S.	5740	2/25/88	22	6.2	4.3	11.6	BEAR CK SNOTEL	7800	3/01/88	---	13.0S	8.9	18.1
SOLDIER R.S. PILLOW	4330	3/01/88	---	6.3	4.6	---	BIG BENO	6700	2/23/88	26	7.2	4.2	8.0
STICKNEY MILL	7430	2/25/88	19	3.9	3.7	8.2	BOSTETTER R.S.	7500	2/23/88	43	12.6	8.8	17.8
STICKNEY MILL PILLOW	7430	3/01/88	---	3.2	3.4	7.5	BOSTTETTER RS PILLOW	7500	3/01/88	---	9.8	7.9	16.0
SWEDE PEAK	7640	2/29/88	31	8.3	5.9	15.2	BOY SCOUT CAMP	7740	2/23/88	32	10.4	9.8	13.4
SWEDE PEAK PILLOW	7640	3/01/88	---	8.3	4.7	13.4	BULL BASIN	5460	3/07/88	0	.0	.8	1.2
TELFER RANCH	5840	2/29/88	11	3.6	3.4	7.9	CEGAR CREEK	6820	2/25/88	24	6.8	5.1	9.4
VIENNA MINE	8960	2/26/88	60	19.9	15.0	31.2	CLEAR CREEK MEADOWS	9420	2/23/88	48	13.6	13.8	19.3
VIENNA MINE PILLOW	8960	3/01/88	---	20.2	14.7	31.1	COLUMBIA BASIN	6650	2/22/88	21	5.9	7.1	8.4
WET CREEK SUMMIT	7680	2/26/88	30	8.7	4.5	10.0	DEADLINE	7400	2/25/88	28	9.5	10.9	19.1
							DEADLINE SOUTH	7450	2/25/88	35	11.9	16.8	21.1
							FOX CREEK	6800	2/25/88	30	8.4	6.4	9.9
							FRY CANYON	6700	2/25/88	---	6.6E	4.9	6.7
							GEORGE CREEK	8840	2/23/88	42	12.2	12.4	18.1
							GOAT CREEK	8800	2/25/88	40	11.5	8.1	16.0
							GOLD CREEK	6600	2/23/88	18	4.4	2.5	5.2
							HOWELL CANYON	7980	2/23/88	50	16.6	14.6	22.9
							HOWELL CANYON PILLOW	7980	3/01/88	---	13.3	11.1	19.0
							HUMMINGBIRD SPRINGS	8950	2/25/88	52	15.6	12.2	20.2
							HYDE PASTURE	5760	3/07/88	1	.1	3.5	5.4
							INDIAN GROVE	7560	2/23/88	23	5.6	5.8	11.1
							JACK CREEK, LOWER	6800	2/24/88	20	5.4	4.1	4.6
							JACKS PEAK	8420	3/01/88	---	16.3E	11.8	20.3
							JOHNSTON POND	6700	3/07/88	12	4.0	---	---
							LANGFORD FLAT CREEK	5980	2/25/88	18	5.8	3.1	5.8
							LAUREL DRAW	6700	3/01/88	---	6.3E	6.5	7.7
							LOGGER SPRINGS	8120	2/23/88	40	11.0	10.2	16.5
							LOOKOUT BUTTE	5650	3/07/88	0	.0	.2	.3
							LOUSE CANYON	6440	3/07/88	0	.0	3.7	4.8
							MAGIC MOUNTAIN	6880	2/25/88	38	11.8	10.4	16.9
							MAGIC MTN PILLOW	6880	3/01/88	---	11.5	9.5	16.9
							MERRIT MOUNTAIN	7000	2/22/88	13	3.4	3.8	5.2
							MUD FLAT	5730	2/28/88	12	4.2	6.4	6.1
							MUD FLAT PILLOW	5730	3/01/88	---	3.6	4.8	5.8
							ONE MILE SUMMIT	7330	2/23/88	12	3.0	3.1	6.0
							OREGON CANYON	6950	3/07/88	1	.1	3.8	5.2
							POLE CREEK R.S.	8330	2/25/88	46	14.6	10.8	17.4
							QUINN RIDGE	6300	3/07/88	0	.0	2.0	1.7
							REO CANYON	6650	3/07/88	11	3.8	5.0	6.4
							RODEO FLAT	6800	2/23/88	---	5.4E	5.5	5.9
							SEVENTYSIX CREEK	7100	3/01/88	---	7.2E	6.5	11.3
							SEVENTYSIX CK SNOTEL	7100	3/01/88	---	5.4S	5.9	9.5
							SHOSHONE BASIN	5810	3/01/88	---	5.6E	3.4	5.5
							SILVER CITY	6400	2/29/88	32	10.7	10.2	14.1
							SOUTH MOUNTAIN	6500	2/29/88	28	10.2	9.8	12.6
							SOUTH MTN PILLOW	6500	3/01/88	---	10.7	10.2	12.2
							SUBLETT	5950	2/23/88	27	6.5	5.2	10.5
							SUCCOR CREEK	6100	3/07/88	11	3.8	4.5	6.3
							TAYLOR CANYON	6200	2/24/88	17	4.2	2.9	5.0
							TOE JAM AM	7700	2/22/88	28	7.8	7.7	9.2
							VAUGHT RANCH	5830	3/07/88	1	.1	2.7	4.1
							VIPONT	7670	2/23/88	29	8.1	7.4	13.4
							WAR EAGLE	7280	3/07/88	12	4.1	14.5	20.2
					</								

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
GREAT BASIN			WATERSHED VII			
CLIFF CANYON	7200	2/26/88	12	3.3	2.9	8.7
CUB RIVER R.S.	5450	2/26/88	23	6.3	4.7	8.6
DANIELS CREEK	6270	2/26/88	17	4.0	3.1	5.9
DRY BASIN	7820	2/26/88	46	15.9	13.7	24.9
DRY CREEK FLAT	6360	2/26/88	19	5.9	2.8	7.9
EMIGRANT SUMMIT	7390	2/29/88	43	14.6	11.5	21.9
EMIGRANT SUM PILLOW	7390	3/01/88	—	12.6	11.4	25.3
EMIGRATION CANYON	6500	2/29/88	27	7.7	5.9	9.9
FRANKLIN BASIN	8020	2/26/88	43	13.8	12.0	21.7
FRANKLIN BSN PILLOW	8040	2/26/88	49	15.3	14.7	26.3
GIVEOUT	6860	2/29/88	33	9.4	6.2	11.0
GIVEOUT PILLOW	6840	3/01/88	—	9.8	5.0	11.8
GIVEOUT NEW	6930	2/29/88	32	9.2	4.8	9.9
LIBERTY SPRING	8600	2/26/88	64	22.3	18.1	33.2
LITTLE BEAVER	6790	2/29/88	37	10.8	7.4	13.8
LOWER ELKHORN	6960	2/26/88	25	6.6	5.8	13.1
LOWER HOME CANYON	7640	2/26/88	31	8.9	6.3	12.0
MONTPELIER CREEK	6540	3/01/88	—	6.2E	3.6	7.7
OXFORD MOUNTAIN	6800	2/26/88	19	6.1	4.2	9.7
OXFORD SPRING	6740	2/26/88	22	6.1	3.6	10.8
OXFORD SPRING PILLOW	6740	2/26/88	22	6.1	3.7	12.7
STRAWBERRY CREEK	5820	2/29/88	25	7.4	5.1	10.2
STRAWBERRY-MINK DVD	6720	2/26/88	42	14.2	8.8	19.0
UPPER ELKHORN	7140	2/26/88	33	9.6	7.4	16.4
UPPER HOME CANYON	8560	2/26/88	45	13.6	11.8	20.4
WILLOW FLAT	6070	2/26/88	36	10.5	8.2	14.3
WORM CREEK	6620	2/26/88	36	10.6	9.1	17.0

WATER CONSERVATION TIPS:

Snow surveys taken near March 1 indicate that below to well below normal flows will occur on many streams across central and southern Idaho. Study this Water Supply Outlook Report carefully for streamflow and reservoir storage figures that concern your area.

Keep in touch with your irrigation district, reservoir manager, or others who monitor and regulate water supplies for estimates of the supply available to you. You may find you'll need to change crops, reduce planted acres, adjust tillage operations, or manage your livestock differently to conserve a short water supply.

Here are some water conservation tips to help make the best use of limited water supplies:

FARMERS

The type of crops you plant may need to be adjusted. Find out whether you will have a little water all season, or more in the spring and none later on. Vary crops accordingly. For example, alfalfa, corn and sugar beets need water all season. Wheat and barley need water early in the season.

Don't plant too early. Be sure the soil is warm enough for rapid and complete seed germination.

Consider using chemicals rather than tillage to control water-using weeds.

If you decide to plant fewer acres, plant drought tolerant cover crops on unplanted fields to protect against wind erosion.

IRRIGATORS

Know your soil type. This is your guide to rate and frequency of irrigation. Know precisely how fast your soil can accept water and its total water holding capacity. This will help you decide how much water to apply at a given time.

If you have a conservation plan for your farm, or if the soil in your area has been mapped, the Soil Conservation Service can cross-check soil type and irrigation data and provide you with the water holding capacity of your soil.

Check your irrigation system carefully. Make certain ditches are cleared of water wasting weeds or debris that slow delivery. Check sprinkler heads and nozzles for wear and leaks, pipes for tight connections, and valves for leaks.

Consider ditch lining or gated pipe. This will reduce the 10-90 percent loss which occurs in earth ditches.

DRYLAND FARMERS

Valley precipitation totals are below normal across Idaho: Soil moisture levels are below normal and good spring precipitation will be needed to bring moisture up to normal.

A conservation tillage system is your best protection. Leaving residue from the previous crop on the soil surface will retard runoff, increase absorption and percolation, and reduce evaporation.

Keep necessary tillage shallow. Delay spring tillage until absolutely essential to help conserve soil moisture.

Don't use turn plows or one-way discs. Use sweeps for the first necessary operation. Over-tillage will destroy residue and dry out the soil.

Use chemicals for weed control whenever possible.

RANCHERS

Consider adjusting livestock numbers to balance with the forage supply. Cull herds more than normal; sell calves and lambs early.

Determine forage needs and plan to buy needed supplements early.

Grow small grain for use as hay or pasture; it requires less water than conventional forage. Defer planting pasture, hay or range forage until a more favorable water year.

Check with the Soil Conservation Service and your local soil conservation district for details concerning your soil and water conservation problems. The next water supply forecast will be issued about April 1, 1988.

The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State Idaho Department of Water Resources
Soil and Water Conservation Districts of Idaho

Federal U.S. Department of Agriculture
Forest Service
U.S. Department of Army
Corps of Engineers
U.S. Department of Commerce
NOAA, National Weather Service
U.S. Department of Interior
Bureau of Reclamation
Geological Survey, Water Resources Division
Shoshone-Bannock Tribal Council

Local Big Lost River Irrigation District
Big Wood Irrigation Company
Boise Project Board of Control
Idaho Water District #01
Lewiston Orchards Irrigation District
Little Wood River Irrigation District
North Board of Control — Owyhee Project
Salmon Falls Irrigation Company
South Board of Control — Owyhee Project

Private Cyprus Mining Company
FMC Corporation
Idaho Power Company
Le Bois Resort
Washington Water Power Company

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

ROOM 345

304 N. 8TH ST.

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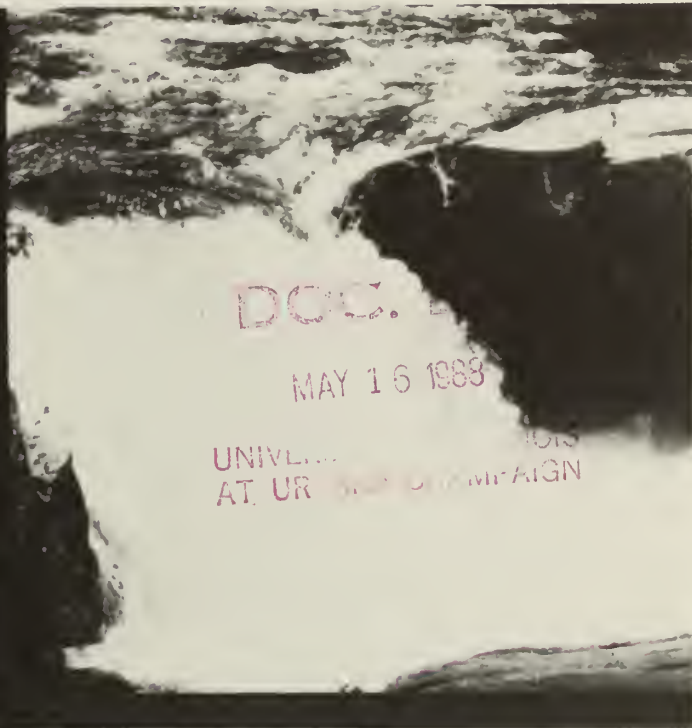
Soil
Conservation
Service

Boise,
Idaho



Idaho Water Supply Outlook

April 1, 1988



Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are terms reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola, Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Denver, CO 80211
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 87102-3157
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97204
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201-1080
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209.

Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Idaho Water Supply Outlook

and

Federal — State — Private Cooperative Snow Surveys

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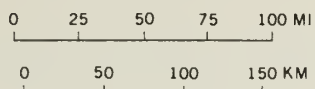
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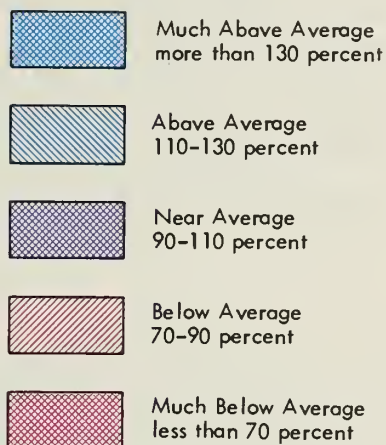
STATE STREAMFLOW PROSPECTS MAP

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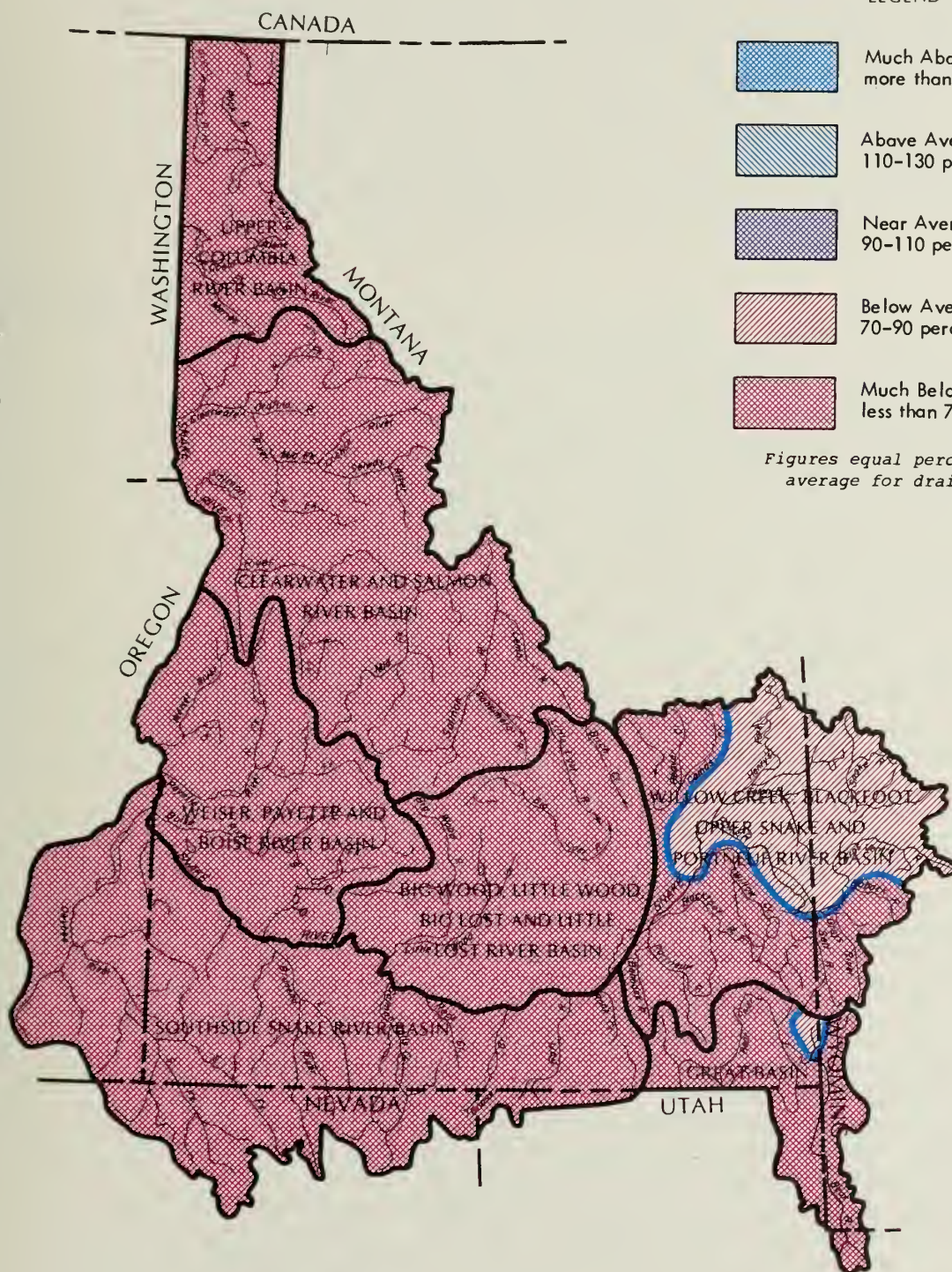
STREAMFLOW PROSPECTS IDAHO

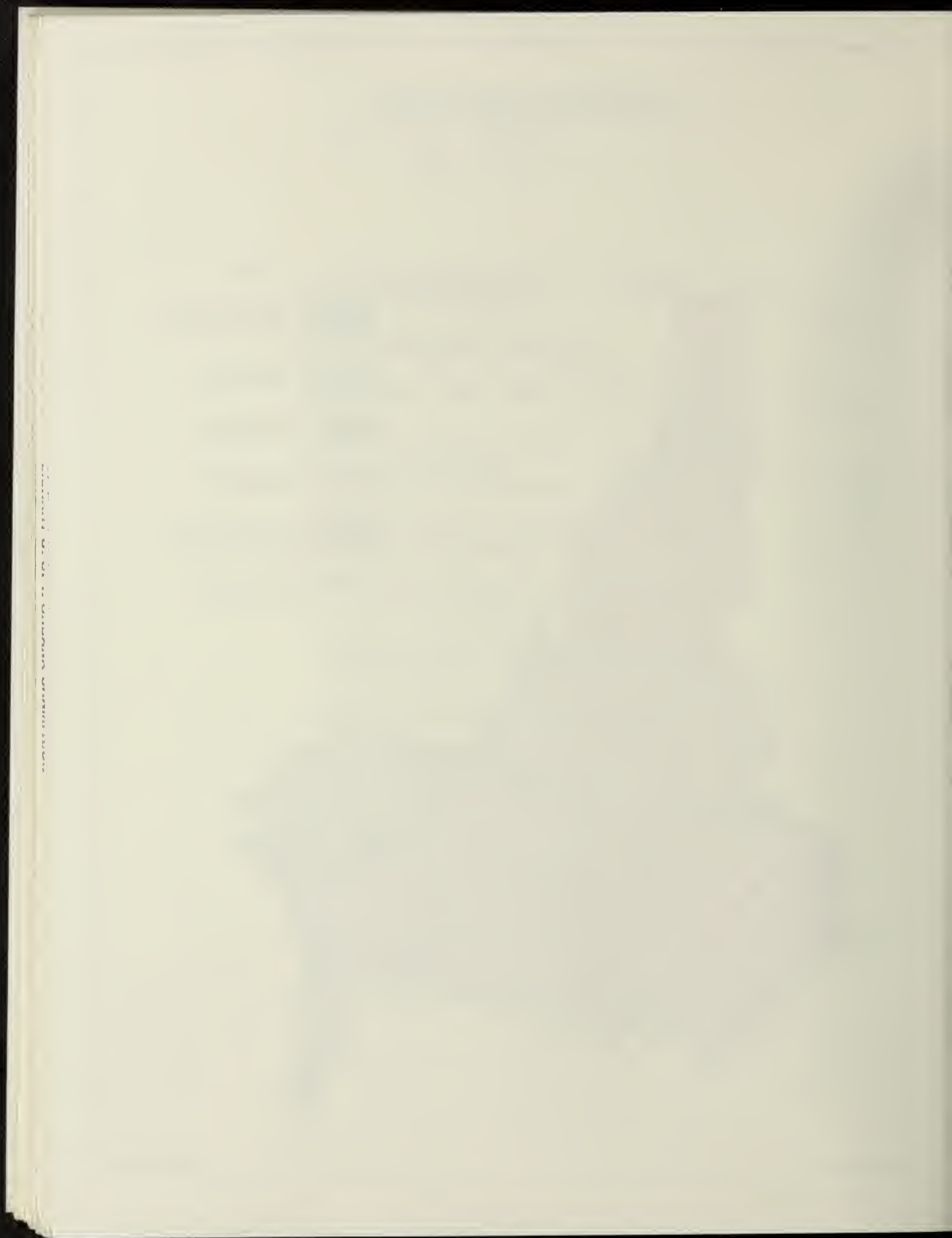


LEGEND



Figures equal percent of
average for drainage.





GENERAL OUTLOOK

SUMMARY:

MARCH PRECIPITATION BROUGHT GOOD IMPROVEMENTS TO THE ST. JOE, SELWAY, AND LOCHSA RIVER BASINS OF NORTHERN IDAHO, AND TO THE BRUNEAU RIVER BASIN IN SOUTHERN IDAHO. ELSEWHERE, SNOWPACKS HAVE MAINTAINED OR DECREASED IN TERMS OF PERCENT OF NORMAL FROM A MONTH AGO. MARCH WAS THE FIRST MONTH IN ALMOST A YEAR TO BRING NEAR TO ABOVE NORMAL PRECIPITATION TO IDAHO. RESERVOIR CONDITIONS IMPROVED ONLY SLIGHTLY IN MARCH, AND MANY SYSTEMS ACROSS SOUTHERN AND CENTRAL IDAHO ARE NOT EXPECTED TO FILL. STREAMFLOW FORECASTS REMAIN BLEAK ACROSS THE SOUTHERN HALF OF THE STATE.

SNOWPACK:

Snow surveys taken near April 1 show snowpack conditions have improved significantly for the second consecutive month on the St. Joe, Selway, and Lochsa River basins of northern Idaho. Good improvements in snowpack are also reported in the Jarbidge Mountain range in extreme southcentral Idaho and northern Nevada. Elsewhere, snowpack conditions remain about the same or have decreased in comparison to normal from a month ago. The lower elevation basins of southcentral Idaho report significant decreases in snowpack and now have snowpacks similar to the very low conditions of last year. By regions, the state's snowpack conditions are as follows: northern Idaho snowpacks generally range from 70 to 90% of normal except in the lower elevation areas of the Palouse and Hayden Lake basins, where snowpacks are 35-52% of average. Central and southcentral Idaho snowpacks range from 54 to 68% of average in the higher elevation basins and 36 to 52% in the lower basins. Snowpacks in eastern Idaho range from 72 to 83% in the higher elevations and 58 to 73% in the lower elevations. Extreme southern Idaho snowpacks vary from 71 to 82% of normal except in the Owyhee basin where a 54% of normal snowpack is reported. Great Great Basin snowpacks range from 61 to 71%, except for the Malad River basin which is only 47% of normal. The April 1 snow surveys generally represent the maximum snow accumulation for the season and snowpack conditions are not expected to improve from this point on. Mild temperatures since late February have warmed the snowpack and caused considerable low elevation snowmelt. This melt is about 2 weeks ahead of normal. If mild weather continues, middle and high elevation snowpacks will begin to melt in mid to late April.

PRECIPITATION:

Near or above normal precipitation was noted over Idaho during March for the first time since last spring. The high pressure ridge, which has been so persistent over the Pacific Northwest, broke down sufficiently during the month to allow a series of Pacific storms to move across the state. Though the state averaged 93% of normal, not all locations received that much, and percentage figures showed a large variation across the state. In general, the northern half of Idaho received near to well above normal precipitation. Some of the higher percentages were Moscow at 187%, Porthill 161%, and Elk River 138%. For the southern half of the state, totals were much lower, but with spotty heavy amounts. Those heavier totals showed up in a band along the Snake River valley from Boise to Twin Falls. Jerome, in March, received 189% of normal precipitation, Mountain Home 143%, and Boise 141%. On the drier side, Idaho Falls reported only 27% of normal and Ketchum and Ashton 37%. Temperatures were on the warm side for the month. Bonners Ferry showed a plus 4.3 degrees from normal and Salmon a plus 4.0 degrees. The southern sections were at or a little above normal, ranging from normal for Twin Falls to a plus 2.1 degrees at Pocatello.

RESERVOIRS:

Reservoir storage levels improved only slightly during March and remain below to well below normal in most reservoirs throughout the state except in the Upper Snake basin where storage levels are near to slightly above normal. The combined storage in 26 key reservoirs is now 91% of average and 61% of capacity. The lowest storage volumes are found in southcentral Idaho in the Oakley, Magic, and Boise Reservoir systems. Oakley Reservoir reports 49% of average storage and only 21% of capacity; Magic Reservoir shows 34% of average and 21% of capacity; and the combined storage of Anderson Ranch, Lucky Peak, and Lake Lowell in the Boise system is 69% of average and 45% of capacity. Reservoir levels in northern Idaho range from 66% of normal in Pend Oreille Lake to 108% in Priest Lake. With the anticipated low streamflows and the likelihood of early irrigation withdrawals, many reservoir systems across central, southcentral, and southwestern Idaho are not likely to fill this spring.

STREAMFLOW:

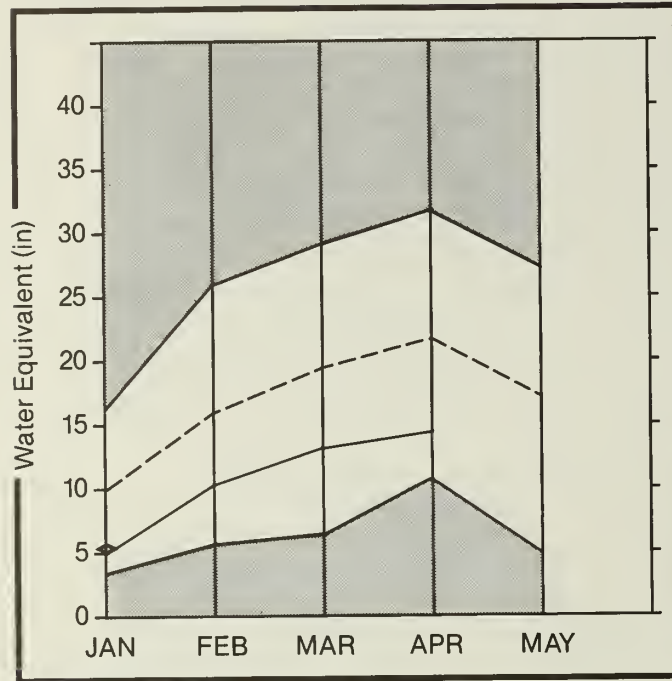
Water supply outlooks for the Idaho Panhandle area show a slight increase over those issued a month ago, but remain below to well below normal. Elsewhere in the state, most forecasts have been decreased 2 to 10% with the largest decreases in the lower elevation basins of southcentral and southwestern Idaho. Apr-July streamflows are now forecasted to be 60-70% of normal in the northern Idaho Panhandle. Central Idaho streams are forecasted to be in the 50-62% of normal range, except on the Weiser, Big Wood, and Little Wood basins where forecasts range from only 39% to 48% of normal. Apr-July streamflows in the higher elevation basins of eastern Idaho are forecast to be in the 70 to 78% of normal range, while the lower elevation basins can expect 60 to 70% of normal flows. Tributaries on the southside of the Snake River are now expected to produce 58 to 62% of normal flows except on the Owyhee drainage which is forecasted at only 36% of normal. Great Basin forecasts range from 48% of normal for the Bear at Harer to 70% for Montpelier Creek near Montpelier. Water is expected to be in short supply in most portions of central, southcentral and southwestern Idaho. Supplies remain adequate to meet most user needs on the Snake main stem, but some shortages may occur on the lower elevation tributaries to the Snake in eastern Idaho. Water users are advised to stay in contact with irrigation districts, reservoir managers, and others who monitor and regulate water supplies for more information about their local situation.

RECREATIONAL OUTLOOK:

March precipitation helped maintain a positive outlook for both spring and summer whitewater rafting opportunities on most Idaho streams and rivers. Above normal temperatures in April or May could alter prospects for floating on Idaho's desert rivers, however. While total precipitation continues to be below normal statewide, streamflow forecasts continue to look better than they did this time last year. The Lochsa and Selway rivers should have good late May and June floating conditions. Some July launch dates on the Selway could be marginal due to low water. Boating on Idaho's major rivers, the Main Salmon, Hells Canyon of the Snake, and the Middle Fork of the Salmon, will be good throughout the spring/summer recreational season. Launch sites may have to be adjusted on the Middle Fork of the Salmon as the water drops in mid to late summer.

Upper Columbia Basin

Mountain snowpack* (inches)



*Based on selected stations

Maximum



Average



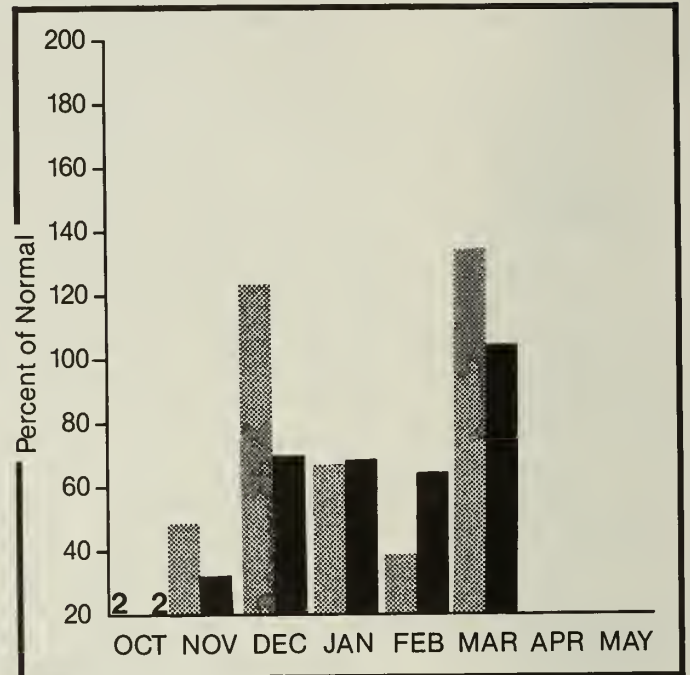
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

April 1 snow measurements show moderate to good improvement in snowpack conditions in the higher elevation areas while lower elevation snowpacks show a net decrease since the March 1 surveys. Basin-wide snowpack conditions in the higher elevation basins currently range from 67% on the Coeur d'Alene to 79% on the St. Joe River, while the lower elevation basins of the Palouse, Hayden Lake, and Rathdrum Creek report 35-52% of normal snowpack. Apr-July streamflow forecasts improved slightly from those issued a month ago, but remain below to well below average. Forecasts now range from 60 to 72% of normal. Reservoir carryover storage varies from 66% of average in Pend Oreille Lake to 108% in Priest Lake.

For more information contact your local Soil Conservation Service office.

UPPER COLUMBIA RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	FEAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
KOOTENAI at Leona 2	APR-SEP	8441.0	5990.0	71	7590.0	90	4390.0	52
	APR-JUL	7340.0	5210.0	71	6600.0	90	3810.0	52
	APR-JUN	5899.0	4190.0	71	5310.0	90	3070.0	52
CLARK FORK at White Horse Rapids 2	APR-SEP	13370.0	9610.0	72	12300.0	92	6940.0	52
	APR-JUL	12150.0	8730.0	72	11200.0	92	6300.0	52
	APR-JUN	10360.0	7460.0	72	9530.0	92	5390.0	52
PEND OREILLE LAKE inflow 2	APR-SEP	14930.0	10500.0	70	13500.0	90	7510.0	50
	APR-JUL	13650.0	9610.0	70	12340.0	90	6880.0	50
	APR-JUN	11780.0	8245.0	70	10600.0	90	5890.0	50
PRIEST RIVER at Priest 2	APR-SEP	893.0	615.0	69	840.0	94	390.0	44
	APR-JUL	838.0	575.0	69	785.0	94	365.0	44
SPOKANE at Post Falls 2	APR-SEP	2820.0	1800.0	64	2480.0	88	1120.0	40
	APR-JUL	2723.0	1740.0	64	2480.0	91	1000.0	37
ST. JOE at Calder	APR-SEP	1281.0	820.0	64	1080.0	84	565.0	44
	APR-JUL	1211.0	785.0	65	1030.0	85	545.0	45
COEUR D' ALENE at Enaville	APR-SEP	830.0	500.0	60	665.0	80	340.0	41
	APR-JUL	789.0	480.0	61	640.0	81	330.0	42

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
HUNGRY HORSE	3451.0	843.0	2336.0	2098.0	Kootenai ab Bonners Ferry	54	96 74
FLATHEAD LAKE	1791.0	868.0	641.0	753.0	Pend Oreille River	163	109 76
PEND OREILLE	1155.0	536.0	376.0	813.7	Clark Fork River	111	117 77
NOXON RAPIDS	335.0	306.3	326.7	213.6	Priest River	6	97 75
COEUR D' ALENE	222.8	194.2	186.2	234.3	Rathdrum Creek	1	93 71
PRIEST LAKE	97.7	42.8	57.8	39.8	Hayden Lake	4	106 52
					Coeur d'Alene River	10	99 67
					St. Joe River	10	110 79
					Spokane River	24	106 73
					Palouse River	2	407 35

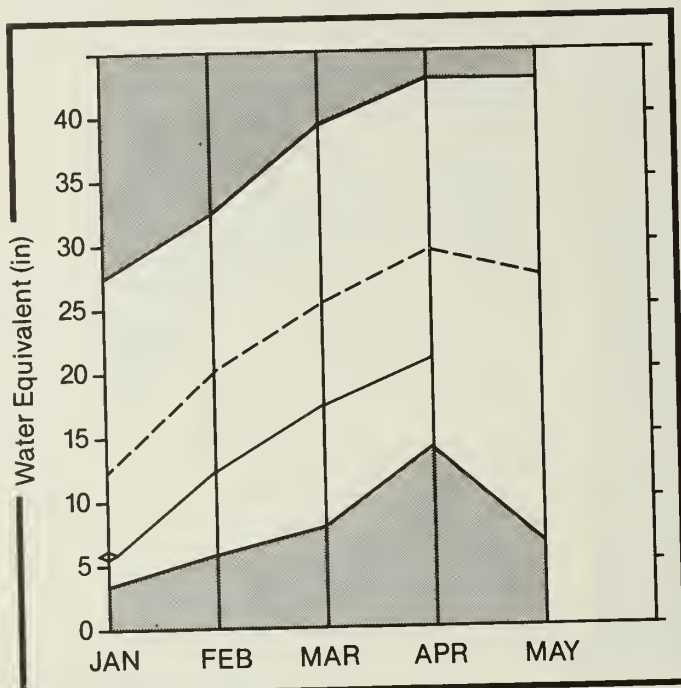
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

Clearwater and Salmon River Basin

Mountain snowpack* (inches)



*Based on selected stations

Maximum



Average



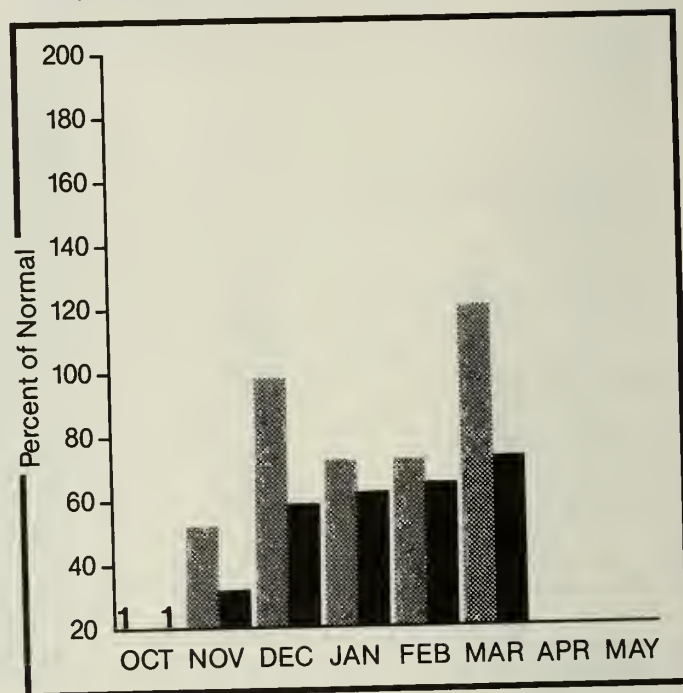
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Above to well above normal precipitation significantly improved snowpack conditions on the Clearwater basin for the second consecutive month. Several snow reporting stations in the headwaters of the Lochsa and Selway drainages are now reporting near normal snow water contents. Snowpacks on the Salmon basin remain about the same as last month except on the Lemhi basin where conditions improved slightly. Currently, basin snowpack conditions range from a low of 67% of average on the Salmon above Salmon to 90% of average on the Selway and Lochsa drainages. Apr-July streamflow projections have been increased on the Clearwater while remaining about the same on the Salmon. Forecasts now range from 55% on the Salmon at Whitebird to 68% on the Clearwater at Spalding. Dworshak Reservoir carryover storage is at 98% of average but only 56% of capacity. Early releases to meet downstream needs will prevent this reservoir from filling to capacity.

CLEARWATER AND SALMON RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
CLEARWATER at Orofino	APR-SEP	5163.0	3400.0	66	4740.0	92	2060.0	40
	APR-JUL	4889.0	3280.0	67	4550.0	93	2010.0	41
CLEARWATER at Spalding	APR-SEP	8378.0	5660.0	68	7590.0	91	3820.0	46
	APR-JUL	7916.0	5370.0	68	7120.0	90	3560.0	45
DWORSHAK RESERVOIR inflow	APR-SEP	3010.0	1920.0	64	2580.0	86	1260.0	42
	APR-JUL	2822.0	1800.0	64	2420.0	86	1180.0	42
SALMON at Whitebird	APR-SEP	7007.0	3850.0	55	5390.0	77	2310.0	33
	APR-JUL	6322.0	3570.0	56	4960.0	78	2180.0	34
SALMON at Salmon	APR-SEP	1077.0	630.0	58	995.0	92	275.0	26
	APR-JUL	919.0	540.0	59	850.0	92	230.0	25

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COUPSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
		THIS YEAR	LAST YEAR	AVG.			
DWORSHAK	3467.8	1955.1	2830.6	1996.2	North Fork Clearwater	15	111 76
					Lochsa River	5	128 90
					Selway River	7	124 89
					Clearwater River	23	118 81
					Salmon River ab Salmon	13	110 67
					Lemhi River	8	112 83
					Salmon River Total	34	118 68

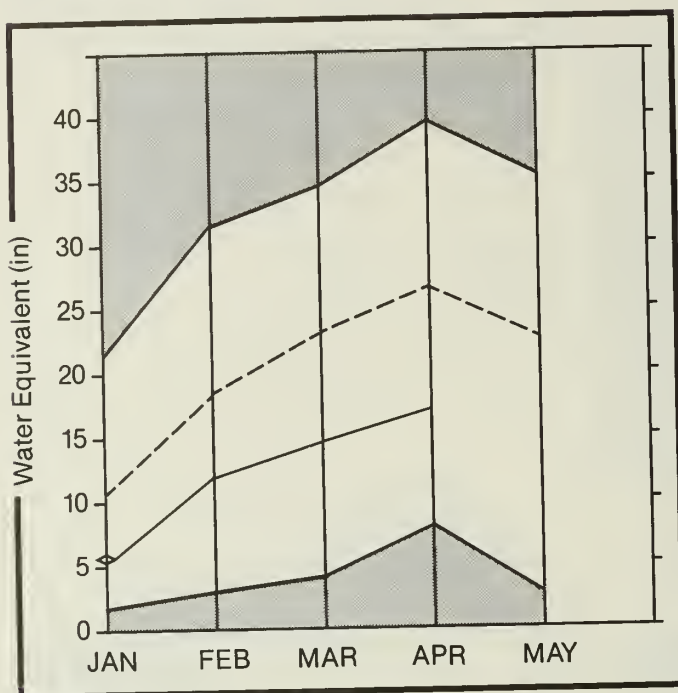
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

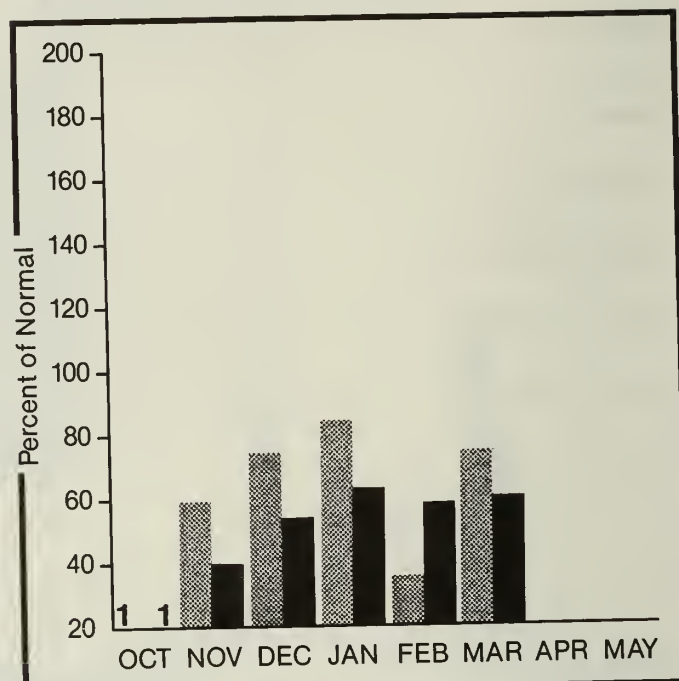
Weiser, Payette, and Boise River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum



Average



Minimum



Current



Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

In comparison to normal, April 1 snowpack conditions remain about the same or have decreased from that reported near March 1. Snowpacks remain well below normal throughout the basin ranging from a low of 41% for the Canyon Creek drainage near Mt. Home to 68% on the Middle and North Forks of the Boise River basin. Mild temperatures during March and late February have melted most low elevation snowpacks below the 5000 ft. level. If mild temperatures continue, middle and high elevation snowpacks are expected to begin melting in mid to late April. With continued mild temperatures, streams will peak and recede to low flow conditions earlier than normal. Apr-July streamflows have again been reduced and now range from only 48 to 60% of normal. Reservoir storage levels remain below normal with most reservoirs reporting between 48 and 85% of average levels and 29 to 68% of capacity. Water is expected to be in very short supply throughout the basin except on the Payette drainage where supplies should be marginally adequate. Water users are advised to keep in touch with their local irrigation districts for estimates of the supply available to them.

WEISER, PAYETTE AND BOISE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
WEISER nr Weiser	APR-SEP	444.0	215.0	48	400.0	90	29.0	7
	APR-JUL	414.0	200.0	48	375.0	91	26.0	6
PAYETTE RIVER at Horseshoe Bend	APR-SEP	1862.0	1000.0	54	1370.0	74	630.0	34
	APR-JUL	1717.0	945.0	55	1290.0	75	600.0	35
NF PAYETTE RIVER at Cascade 2	APR-SEP	568.0	315.0	55	435.0	77	196.0	35
	APR-JUL	531.0	295.0	56	405.0	76	185.0	35
NF PAYETTE RIVER nr Banks 2	APR-SEP	737.0	415.0	56	555.0	75	275.0	37
	APR-JUL	691.0	395.0	57	525.0	76	265.0	38
SF PAYETTE RIVER at Lowman	APR-SEP	516.0	300.0	58	395.0	77	205.0	40
	APR-JUL	458.0	270.0	59	350.0	76	190.0	41
DEADWOOD RESERVOIR inflow	APR-JUL	143.0	86.0	60	111.0	78	61.0	43
BOISE RIVER nr Twin Springs 1	APR-SEP	722.0	410.0	57	535.0	74	280.0	39
	APR-JUL	664.0	375.0	56	495.0	75	255.0	38
SF BOISE at Anderson Dam 1	APR-SEP	619.0	330.0	53	445.0	72	220.0	36
	APR-JUL	578.0	310.0	54	415.0	72	205.0	35
BOISE RIVER nr Boise 1	APR-SEP	1628.0	830.0	51	1150.0	71	505.0	31
	APR-JUL	1508.0	780.0	52	1080.0	72	480.0	32
	APR-JUN	1334.0	695.0	52	960.0	72	425.0	32

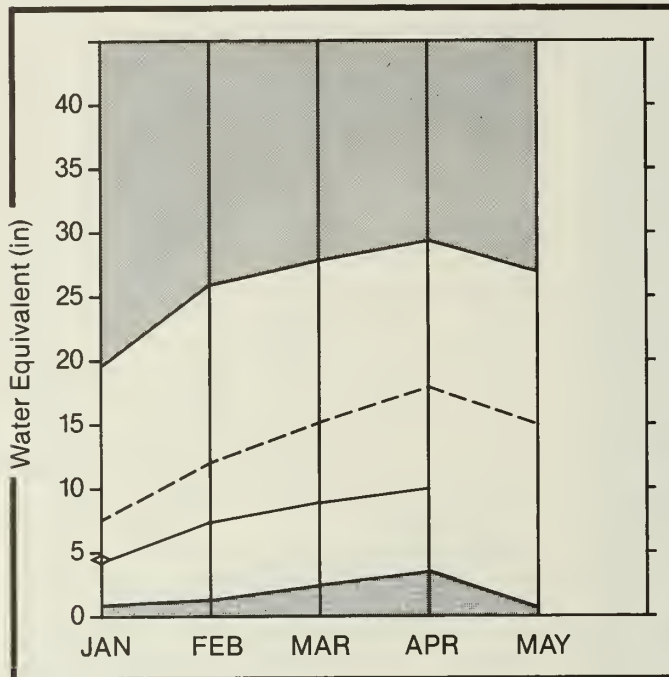
RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
MANN CREEK		NO REPORT			Mann Creek	5	141 49
CASCADE	703.2	377.4	506.5	377.6	Weiser River	9	124 53
DEADWOOD	162.0	72.0	98.0	90.8	North Fork Payette	10	103 62
ANDERSON RANCH	464.2	134.4	384.4	278.1	South Fork Payette	7	114 64
ARROWROCK	286.6	193.7	181.9	227.8	Payette River Total	16	107 62
LUCKY PEAK	307.0	123.4	218.9	153.2	Middle & North Fork Boise	9	136 68
LAKE LOWELL (DEER FLAT)	177.0	101.2	152.9	152.9	South Fork Boise River	11	122 56
					Boise River Total	20	130 62
					Canyon Creek	3	147 41

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

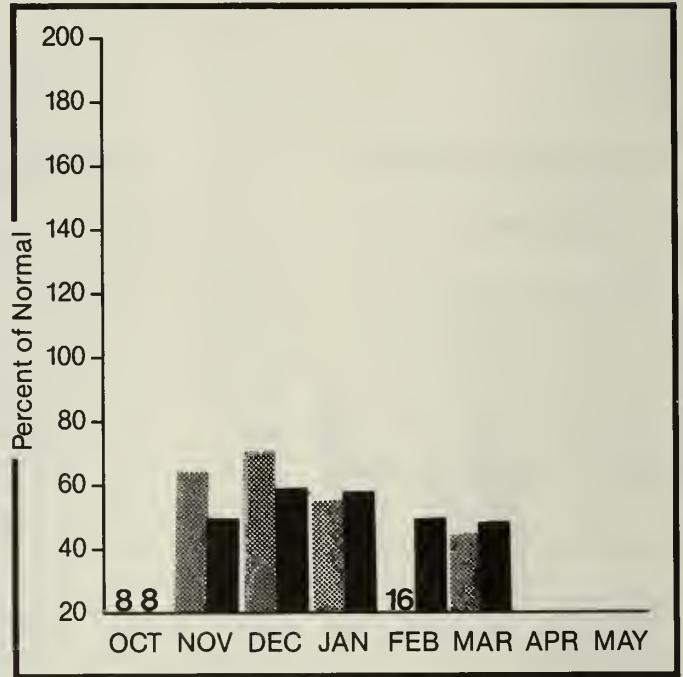
Big Wood, Little Wood, Big Lost, and Little Lost River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum



Average



Minimum



Current



Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Snowpack conditions in the lower elevation basins of the Little Wood, Fish Creek, and Camas Creek drainages show a significant decrease since March 1 and now have snowpacks similar to last year on this date. In the higher elevation basins, snowpacks remained about the same as March 1 or decreased slightly in comparison to normal. Currently, snowpacks range from a low 36% of average on the Little Wood and Fish Creek basins to 69% on the Little Lost basin. Apr-July streamflow predictions have been reduced and now range from only 40% on the Little Wood to 63% on Little Lost. Reservoir levels remain very low for the anticipated runoff conditions. Magic Reservoir will not fill and the filling of Little Wood Reservoir is questionable. Water is expected to be in short supply on most basins, particularly on the Big Wood system. Water users are advised to keep in touch with their local irrigation district for estimates of the supply available to them. The amount and timing of spring precipitation will be important factors in determining the available water supply.

BIG WOOD, LITTLE WOOD, BIG LOST AND LITTLE LOST RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BIG WOOD nr Bellevue	APR-SEP	217.0	111.0	51	170.0	78	50.0	23
	APR-JUL	202.0	105.0	52	162.0	80	48.0	24
MAGIC RESERVOIR inflow	APR-SEP	338.0	150.0	44	305.0	90	68.0	20
	APR-JUL	322.0	145.0	45	290.0	90	65.0	20
LITTLE WOOD nr Carey	APR-SEP	107.0	42.0	39	70.0	65	13.0	12
	APR-JUL	99.0	40.0	40	66.0	67	13.0	13
BIG LOST at Howell Ranch	APR-SEP	219.0	117.0	53	185.0	84	49.0	22
	APR-JUL	192.0	104.0	54	164.0	85	44.0	23
	APR-JUN	148.0	81.0	55	127.0	86	35.0	24
BIG LOST nr Mackay 2	APR-SEP	195.0	100.0	51	165.0	85	35.0	18
LITTLE LOST bl Wet Ck	APR-SEP	38.8	24.0	62	38.0	98	10.0	26
	APR-JUL	31.4	19.6	63	31.0	99	9.0	29
LITTLE LOST nr Howe	APR-SEP	44.0	26.0	59	41.0	93	11.0	25
	APR-JUL	33.0	19.8	60	31.0	94	9.0	27

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
MAGIC	191.5	40.0	145.0	117.4	Big Wood ab Magic	10	112	60
LITTLE WOOD	30.0	20.3	29.5	18.4	Camas Creek	6	121	39
CAREY VALLEY		NO REPORT			Big Wood Total	15	113	54
MACKAY	44.5	28.4	38.8	33.3	Little Wood River	4	87	36
					Fish Creek	3	121	36
					Big Lost River	9	101	54
					Little Lost River	4	124	69

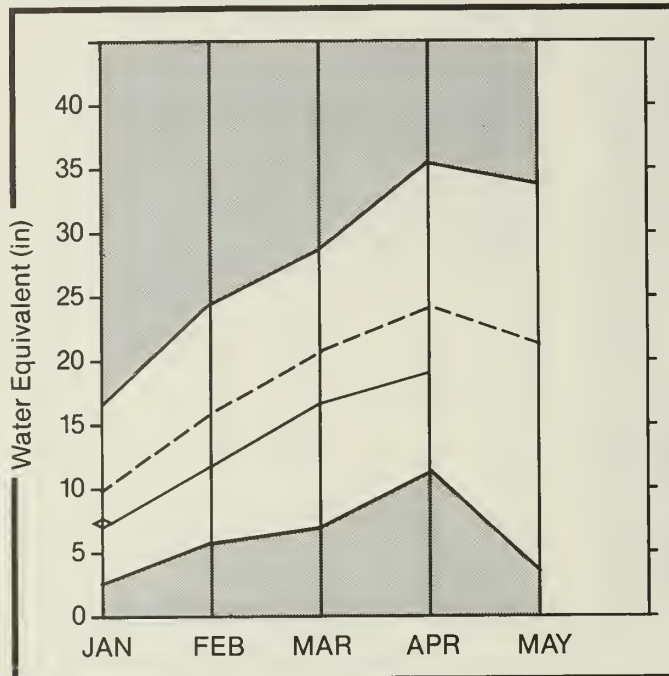
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

Willow Creek, Blackfoot, Upper Snake, and Portneuf River Basin

Mountain snowpack* (inches)

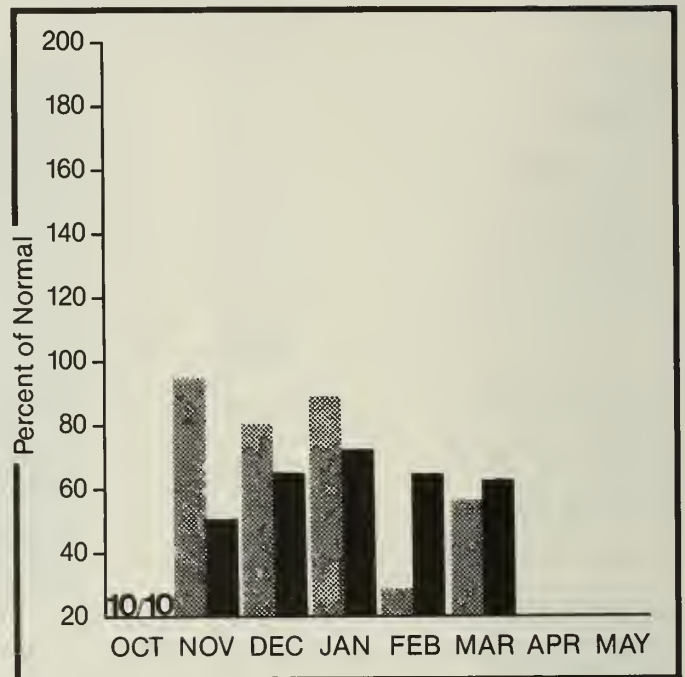


*Based on selected stations

Maximum
Minimum

Average
Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

April 1 snow surveys show that snowpack conditions remain about the same or have decreased slightly in comparison to normal from those reported near March 1. Snowpacks in the higher elevation basins of the Henry's Fork, Teton, and Upper Snake range from 72 to 81% of normal, while the lower elevation basins report snowpacks ranging from 58 to 73% of average. Seasonal volume streamflow forecasts remain the same or have been reduced slightly from those made a month ago. Forecasts now range from 61% on the Portneuf to 75% on the Snake at Moran. Reservoir levels are good with most reservoirs reporting normal to slightly above normal storage volumes. Water supplies are expected to be adequate to meet most user needs on the Snake main stem. Some minor shortages may occur on the lower elevation basins of the Portneuf and Blackfoot with the amount and timing of spring and early summer precipitation playing an important role in determining the available water supply.

WILLOW CREEK, BLACKFOOT, UPPER SNAKE AND PORTNEUF RIVER BASIN

STREAMFLOW FORECASTS

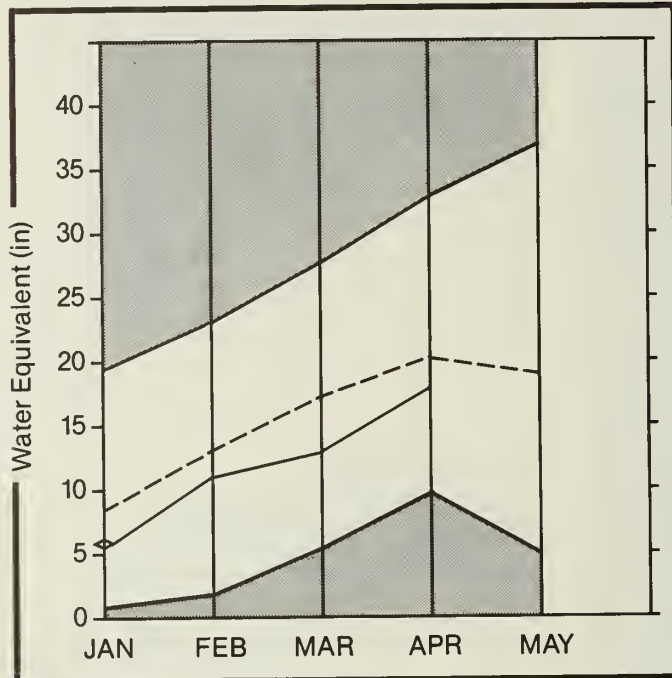
FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
HENRY'S FORK nr Ashton 2	APR-SEP APR-JUL	746.0 557.0	515.0 390.0	69 70	580.0 435.0	78 78	445.0 340.0	60 61
HENRYS FORK nr Rexburg 2	APR-SEP APR-JUL	1595.0 1260.0	1110.0 880.0	70 70	1360.0 1080.0	85 86	850.0 675.0	53 54
FALLS RIVER nr Squirrel	APR-JUL	373.0	265.0	71	325.0	87	200.0	54
TETON RIVER ab S Leigh Ck	APR-SEP APR-JUL	194.0 145.0	144.0 109.0	74 75	169.0 128.0	87 88	119.0 90.0	61 62
TETON nr St. Anthony	APR-SEP APR-JUL	479.0 387.0	350.0 285.0	73 74	405.0 330.0	85 85	290.0 240.0	61 62
SNAKE at Moran 1	APR-SEP	888.0	670.0	75	780.0	88	560.0	63
PALISADES LAKE inflow 1	APR-SEP	3852.0	2780.0	72	3550.0	92	2010.0	52
SNAKE nr Heise 2	APR-SEP APR-JUL	4142.0 3524.0	3000.0 2550.0	72 72	3830.0 3250.0	92 92	2210.0 1880.0	53 53
SNAKE nr Blackfoot 2	APR-SEP APR-JUL	5680.0 4589.0	4090.0 3290.0	72 72	5000.0 4050.0	88 88	3100.0 2530.0	55 55
PORTNEUF at Topaz	MAR-SEP MAR-JUL	109.0 88.0	65.0 54.0	60 61	102.0 84.0	94 95	28.0 24.0	26 27

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE THIS YEAR	LAST YEAR	** AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
ISLAND PARK	127.6	132.5	134.2	119.3	Camas-Beaver Creeks	4	99 58
GRASSY LAKE	15.2	9.5	13.3	11.2	Henry's Fork River	13	131 75
JACKSON LAKE	624.4	102.9	113.4	525.9	Teton River	9	121 78
PALISADES	1200.0	913.7	1323.2	968.2	Snake above Palisades	32	120 77
AMERICAN FALLS	1700.0	1567.7	1630.9	1452.5	Snake above Jackson Lake	8	145 81
BROWNLEE	975.3	614.0	824.8	449.1	Gros Ventre River	3	100 83
BLACKFOOT	348.7	258.1	---	260.7	Greys River	5	130 79
HENRY'S LAKE	90.4	79.4	83.3	80.1	Salt River	6	107 65
RIRIE	96.5	53.6	58.3	53.1	Willow Creek	11	114 73
					Blackfoot River	8	113 65
					Portneuf River	10	126 60
					Toponce Creek	3	131 59

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 The average is computed for the 1961-85 base period.

Southside Snake River Basin

Mountain snowpack* (inches)



*Based on selected stations

Maximum



Average



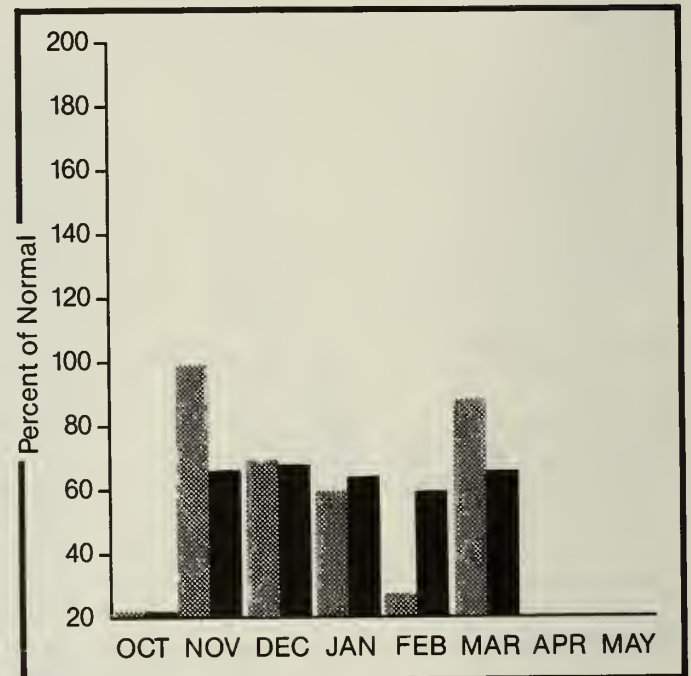
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Snowpack conditions show a good improvement in comparison to normal over the past month on all basins except the Owyhee which reports a declining snowpack. Snowpacks now range from 71 to 82% of normal on all basins from the Bruneau basin eastward. The Owyhee basin now shows only a 60% of normal snowpack. March-July and Apr-July streamflow forecasts currently range from 36% on Inflow to Owyhee Reservoir to 65% on Salmon Falls Creek. Reservoir levels remain well below normal, ranging from 49% of average (21% of capacity) in Oakley Reservoir to 74% of average (25% of capacity) in Salmon Falls Creek Reservoir. Water supplies are expected to be marginal in most basins. The amount of spring and early summer precipitation will be important factors in determining the amount of water available and water users are advised to keep in touch with their local irrigation districts for estimates of the supply available to them.

SOUTHSIDE SNAKE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
OAKLEY RESERVOIR inflow	APR-SEP	33.0	19.0	58	31.0	94	7.0	21
	APR-JUL	29.7	17.5	59	28.0	94	7.0	24
SALMON FALLS CK nr San Jacinto	MAR-SEP	102.0	65.0	64	102.0	100	28.0	27
	MAR-JUL	97.0	63.0	65	98.0	101	28.0	29
	MAR-JUN	91.0	59.0	65	92.0	101	26.0	29
BRUNEAU nr Hot Spring	MAR-SEP	260.0	160.0	62	255.0	98	64.0	25
	MAR-JUL	248.0	156.0	63	245.0	99	64.0	26
OWYHEE RIVER nr Gold Creek 2	APR-JUL	27.8	16.1	58	31.0	112	1.0	4
OWYHEE RIVER nr Owyhee 2	APR-JUL	86.0	43.0	50	83.0	97	3.0	3
OWYHEE LAKE inflow 1	APR-SEP	455.0	166.0	36	340.0	75	46.0	10
	APR-JUL	427.0	154.0	36	320.0	75	43.0	10
OWYHEE at Rome 2	APR-JUL	376.0	145.0	39	310.0	82	60.0	16

RESERVOIR STORAGE					(1000AF)	WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF		
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE	
OAKLEY	77.4	16.6	34.8	34.0	Raft River	9	110	71	
SALMON FALLS	182.6	46.0	99.7	62.3	Goose-Trapper Creeks	5	115	71	
OWYHEE	715.0	288.2	565.9	560.6	Salmon Falls Creek	12	120	82	
					Bruneau River	12	119	80	
					Owyhee River	27	91	60	

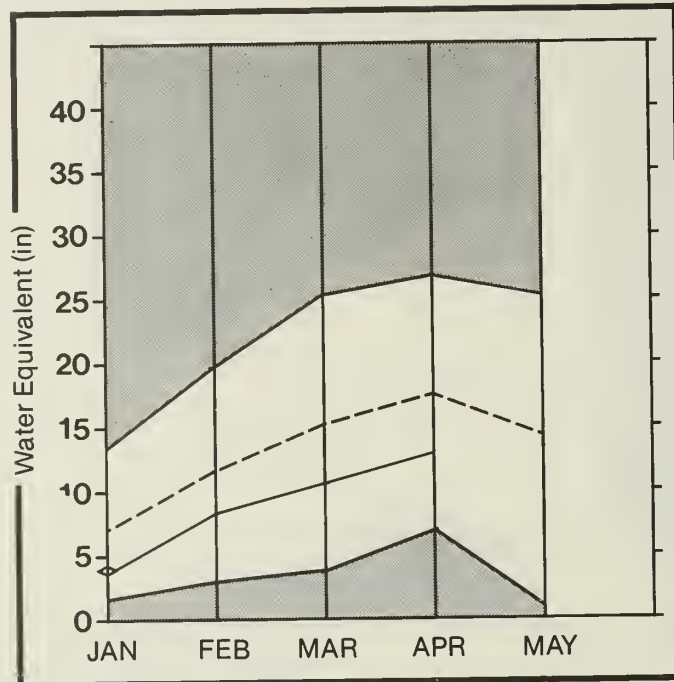
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

Great Basin

Mountain snowpack* (inches)



*Based on selected stations

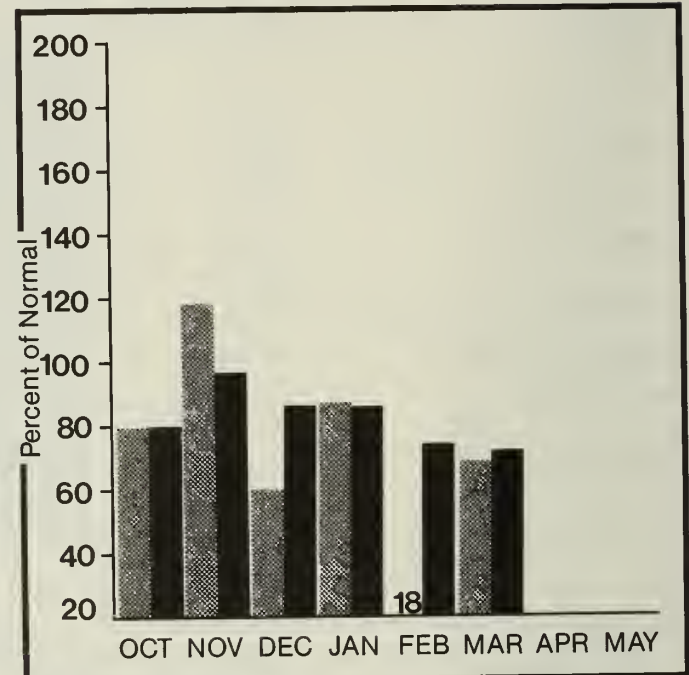
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

Snowpack conditions remain about the same or have decreased slightly in comparison to normal from that reported March 1. Basin snowpacks remain below to well below normal, ranging from 47% on the Malad drainage to 71% on the Upper Bear River. Apr-July streamflow forecasts remain below to well below normal, ranging from 48% to 72%. Bear Lake is reported at 106% of normal storage on April 1, while Montpelier Creek Reservoir shows 75% of normal storage. Water supplies should be adequate to meet most user needs provided normal precipitation patterns occur through the spring and early summer period.

For more information contact your local Soil Conservation Service office.

GREAT BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	FEAS. MAX. (1000AF)	FEAS. MAX. (% AVG.)	FEAS. MIN. (1000AF)	FEAS. MIN. (% AVG.)
BEAR at Harer	APR-SEP	310.0	150.0	48	215.0	69	82.0	26
MONTPELIER CR nr Montpelier	APR-SEP	13.9	10.0	72	15.0	108	5.0	36
CUB RIVER nr Preston	APR-SEP	51.8	31.0	60	49.0	95	15.0	29
	APR-JUL	46.8	29.0	62	39.0	83	19.0	41

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **	THIS YEAR	LAST YEAR	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
				AVG.			LAST YR.	AVERAGE
BEAR LAKE	1421.0	1064.7	1086.2	1002.1	Bear River (above Harer)	11	114	71
MONTPELIER CREEK	3.4	1.2	2.5	1.6	Montpelier Creek	5	126	70
					Mink Creek	7	147	64
					Cub River	4	121	61
					Malad River	7	152	47

1 - Feas. max. and feas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
 2 - Corrected for upstream diversions or changes in reservoir storage.
 The average is computed for the 1961-65 base period.

SNOW DATA MEASUREMENTS

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
UPPER COLUMBIA BASIN							WATERSHED I						
ABOVE BURKE	4100	3/30/88	44	15.2	13.6	22.6	MEADOW LAKE	9150	3/26/88	44	14.1	10.9	19.9
ABOVE ROLANO	4350	4/01/88	64	24.8	25.6	33.1	MILL CREEK SUMMIT	8800	3/26/88	50	15.8	14.8	23.0
BEAR MOUNTAIN	5400	3/25/88	105	37.0	35.5	61.1	MILL CREEK ST PILLOW	8800	4/01/88	---	15.9	---	21.1
BEAR MTN PILLOW	5400	4/01/88	---	45.4	53.7	62.6	MOONSHINE	7440	3/30/88	30	7.5	5.1	10.7
BELOW ROLANO	3920	4/01/88	27	10.4	12.0	14.5	MOONSHINE PILLOW	7440	4/01/88	---	10.2	6.3	11.4
BENTON MEADOW	2370	3/31/88	0	.0	.0	4.2	MOOSE CREEK	6200	4/01/88	45	13.0	7.8	16.9
BENTON SPRING	4920	3/31/88	39	13.2	13.6	19.4	MOOSE CR PILLOW	6200	4/01/88	---	14.2	9.5	16.8
BREEZY SADDLE	5010	3/28/88	70	24.8	21.7	32.8	MORGAN CREEK	7600	3/26/88	38	9.9	7.1	14.3
CHILCO RIOGE	3650	4/01/88	0	.0	.0	5.0	MORGAN CREEK PILLOW	7600	4/01/88	---	10.2	7.1	13.9
CONIE RIOGE	3900	4/01/88	10	3.3	.0	6.2	MORSE CREEK SAWMILL	7120	3/27/88	29	7.0	7.0	9.4
COPPER RIDGE	4820	3/31/88	52	18.7	19.0	27.2	MOUNTAIN MEADOWS	6360	3/28/88	58	18.5	14.3	23.8
CORNER CREEK	3150	4/01/88	14	4.6	5.4	6.1	MOUNTAIN MDWS PILLOW	6360	4/01/88	68	22.3	15.9	26.2
EAST TWIN	4130	3/31/88	16	3.7	1.4	8.8	NEZ PERCE PASS	6570	3/26/88	43	15.6	10.6	17.8
FORTY-NINE MEADOWS	4830	3/28/88	65	22.9	19.3	31.2	PERREAU MEADOWS	8500	3/31/88	48	12.3	10.3	17.8
FOURTH OF JULY SUM	3200	3/30/88	5	1.7	.0	7.3	PIERCE R.S.	3080	3/31/88	12	3.4	5.0	8.9
GRANITE PEAK	6000	3/28/88	106	34.7	31.2	45.4	REOFISH LAKE FLAT	6560	3/31/88	29	9.5	6.2	12.4
HUMBOLOT GULCH	4250	3/30/88	40	12.8	8.4	16.8	ROCK FLAT SUMMIT	5310	3/26/88	38	12.5	11.6	19.1
HUMBOLOT GLCH PILLOW	4250	4/01/88	---	7.7	8.5	15.8	SAOOLE MOUNTAIN	7940	3/29/88	64	21.1	15.9	26.2
KELLOGG PEAK AM	5560	4/01/88	57	20.0	24.4	32.9	SAVAGE PASS	6170	3/31/88	71	24.6	18.4	27.3
LOOKOUT	5140	3/30/88	74	25.0	25.0	35.1	SAVAGE PASS PILLOW	6170	4/01/88	---	24.0	18.0	29.0
LOOKOUT PILLOW	5140	4/01/88	---	25.4	25.3	33.6	SCHWARTZ LAKE	8540	3/26/88	43	11.6	11.1	13.5
LOST LAKE	6110	3/28/88	126	54.6	44.6	59.3	SECESH SUMMIT	6520	3/26/88	67	23.6	21.0	36.8
LOST LAKE PILLOW	6110	4/01/88	134	46.7	51.6	66.1	SECESH SUMMIT PILLOW	6520	4/01/88	---	27.5	20.6	37.3
LOWER SANOS CREEK	3120	3/31/88	42	13.5	14.4	20.0	SHANGHAI SUMMIT	4570	3/28/88	46	16.4	18.1	26.5
MOSQUITO RIOGE	5200	4/01/88	76	27.2	30.2	38.2	SHANGHAI SUM PILLOW	4570	4/01/88	---	18.5	19.3	27.9
ROLANO SUMMIT	5120	4/01/88	72	28.4	30.2	38.2	SHERWIN	3200	3/30/88	25	7.7	4.8	12.1
SAGE CREEK SAOOLE	4080	4/01/88	31	10.8	12.3	18.4	SHERWIN PILLOW	3200	4/01/88	---	7.0	5.1	11.4
SCHWEITZER BASIN	6090	3/30/88	102	37.8	38.4	47.8	SQUAW MEADOW	5930	3/26/88	62	23.2	19.8	37.0
SCHWEITZER BN PILLOW	6090	4/01/88	---	42.4	46.3	50.2	TWIN PEAKS	9190	3/31/88	48	15.2	15.1	25.9
SCHWEITZER BOWL	4800	3/30/88	61	22.7	23.0	30.5	VIENNA MINE	8960	4/01/88	72	24.1	21.1	37.9
SCHWEITZER RIOGE	6200	3/30/88	97	36.5	42.5	47.9	VIENNA MINE PILLOW	8960	4/01/88	---	25.8	19.1	37.8
SHERWIN	3200	3/30/88	25	7.7	4.8	12.1	WE88 CREEK	4720	3/29/88	25	7.2	7.4	9.0
SHERWIN PILLOW	3200	4/01/88	---	7.0	5.1	11.4	WEST BRANCH	5560	3/31/88	42	15.2	11.0	25.6
SKITWISH RIDGE	5110	3/31/88	61	22.3	23.9	33.2	WEST BRANCH PILLOW	5560	4/01/88	---	16.3	14.4	25.7
SMITH CREEK	4800	3/29/88	99	36.8	33.8	46.4							
SUNSET	5540	4/01/88	65	22.0	21.4	33.5							
SUNSET PILLOW	5540	4/01/88	---	26.8	28.0	35.8							
TWIN SPIRIT DIVIOE	3480	4/03/88	20	7.2	---	11.5							
WEST TWIN	4220	3/31/88	10	2.0	.0	7.5							
CLEARWATER AND SALMON BASINS							WATERSHED II						
ABOVE GILMORE	8200	3/26/88	29	8.4	7.6	10.3	ATLANTA SUMMIT	7600	4/01/88	72	24.1	18.6	35.6
ASPEN-HALL PASS AM	8200	3/28/88	38	9.6	6.7	10.5	ATLANTA SUM PILLOW	7580	4/01/88	---	22.7	18.5	32.6
BANNER SUMMIT	7040	3/31/88	56	18.3	17.1	30.8	ATLANTA TOWNSITE	5370	4/01/88	20	6.6	4.1	---
BANNER SUMMIT PILLOW	7040	4/01/88	---	18.8	15.6	27.9	BANNER SUMMIT	7040	3/31/88	56	18.3	17.1	30.8
BEAR BASIN	5350	3/26/88	39	12.0	12.0	20.1	BANNER SUMMIT PILLOW	7040	4/01/88	---	18.8	15.6	27.9
BEAR BASIN PILLOW	5350	4/01/88	---	15.7	11.3	20.3	BAD BEAR	4940	3/31/88	25	9.3	4.0	13.4
BIG CREEK SUMMIT	6580	3/26/88	71	24.7	19.6	37.5	BEAR BASIN	5350	3/26/88	39	12.0	12.0	20.1
BIG CREEK SUM PILLOW	6580	4/01/88	---	20.8	20.5	33.9	BEAR BASIN PILLOW	5350	4/01/88	---	15.7	11.3	20.3
BORAH	6200	3/31/88	18	5.0	5.5	6.1	BEAR SAOOLE	6180	4/02/88	36	11.1	13.0	31.4
BOULOER CREEK	5440	3/29/88	32	12.2	7.6	23.6	BEAR SAOOLE PILLOW	6180	4/01/88	---	14.8	13.3	31.6
BREEZY SAOOLE	5010	3/28/88	70	24.8	21.7	32.8	BENNETT MOUNTAIN	6560	3/27/88	35	11.2	8.9	18.1
BRUNOAGE MOUNTAIN	7560	4/01/88	---	30.3E	23.0	48.3	BENNETT MTN PILLOW	6560	4/01/88	---	11.6	10.3	20.0
BRUNO CREEK	7920	4/01/88	50	16.0E	10.9	17.9	BIG CREEK SUMMIT	6580	3/26/88	71	24.7	19.6	37.5
BUCK MEADOWS	5650	3/28/88	75	26.6	23.2	30.7	BIG CREEK SUM PILLOW	6580	4/01/88	---	20.8	20.5	33.9
CAYUSE AIRSTRIP	3500	3/31/88	18	5.3	5.0	8.7	BOGUS BASIN	6340	3/31/88	48	17.8	13.8	25.2
COOL CREEK	6250	3/31/88	122	39.6	36.5	52.7	BOGUS BASIN ROAD	5540	3/31/88	0	.0	.0	2.2
COOL CREEK PILLOW	6280	4/01/88	---	40.4	36.4	49.6	BOULOER CREEK	5440	3/29/88	32	12.2	7.6	23.6
COOLWATER MOUNTAIN	6030	3/28/88	100	33.4	29.6	34.9	BRUNOAGE MOUNTAIN	7560	4/01/88	---	30.3E	23.0	48.3
COPES CAMP	7520	3/26/88	32	8.4	5.6	8.7	BRUNOAGE RESV PILLOW	4500	4/01/88	---	18.7	16.0	---
CRATER MEADOWS	5960	3/31/88	100	37.7	31.6	45.4	CAMAS CREEK DIVIOE	5710	3/27/88	4	1.9	.0	10.2
CRATER MOWS PILLOW	5960	4/01/88	---	39.3	32.7	48.0	CHIMNEY CREEK	6400	3/27/88	16	5.7	5.3	13.4
CROOKED FORK	3610	3/30/88	30	12.2	5.0	12.4	COUCH SUMMIT	6840	3/27/88	27	8.9	7.9	18.8
DEADWOOD SUMMIT	6860	3/31/88	83	30.4	26.9	46.4	COZY COVE	5380	3/31/88	17	7.2	7.0	15.8
DEADWOOD SUM PILLOW	6860	4/01/88	---	31.7	26.4	52.2	CRAWFORD R.S.	4860	3/26/88	3	1.2	.0	5.7
DOUBLE SPGS PASS AM	8380	3/26/88	30	7.1	7.5	10.8	OEAOMAN GULCH	5600	3/30/88	43	14.5	13.0	16.8
ELK BUTTE	5550	3/28/88	70	23.1	24.3	37.4	OEAOWOOD AIRSTRIP	5360	4/01/88	---	7.4E	8.6	15.3
ELK BUTTE PILLOW	5550	4/01/88	---	29.9	27.4	42.0	OEAOWOOD SUMMIT	6860	3/31/88	83	30.4	26.9	46.4
FISH LAKE AIRSTRIP	5650	3/28/88	103	37.1	29.6	40.0	OEAOWOOD SUM PILLOW	6860	4/01/88	---	31.7	26.4	52.2
FORTY-NINE MEADOWS	4830	3/28/88	65	22.9	19.3	31.2	OOLLARHIOE SUMMIT	8420	4/01/88	51	15.8	14.0	25.4
GALENA SUMMIT	8780	3/29/88	50	14.6	14.0	24.4	OOLLARHIOE SM PILLOW	8420	4/01/88	---	16.5	14.7	26.0
GALENA SUMMIT PILLOW	8780	4/01/88	---	14.2	12.8	19.6	GRAHAM GUARO STATION	5690	3/31/88	26	10.7	7.9	15.5
GIBBONS PASS	7100	3/29/88	56	18.8	13.6	24.0	IDAHO CITY TOWNSITE	4000	3/31/88	0	.0	.0	1.4
GOAT LAKE	6500	3/28/88	112	38.9	35.5	48.0	JACKSON PEAK	7070	3/31/88	64	20.8	16.0	32.2
GRANITE PEAK	6000	3/28/88	106	34.7	31.2	45.4	JACKSON PEAK PILLOW	7070	4/01/88	---	21.5	16.8	31.0
HEMLOCK BUTTE	5810	3/28/88	96	33.3	31.7	50.2	LAKE FORK	5290	3/26/88	29	9.2	16.4	16.2
HEMLOCK BUTTE PILLOW	5810	4/01/88	---	37.2	33.8	51.0	LITTLE CAMAS FLAT	4940	3/27/88	0	.0	.0	4.0
HOOOONO BASIN	6050	4/01/88	112	43.5	39.2	51.8	MANN CREEK	6080	4/02/88	42	15.7	15.4	26.6
HOOOONO CREEK	5900	4/01/88	102	37.8	34.2	47.8	MOORES CREEK SUMMIT	6100	3/31/88	68	24.1	18.1	33.0
KIT CARSON PASTURE	4950	3/26/88	26	9.0	5.5	8.9	MOORES CK SUM PILLOW	6100	4/01/88	---	26.7	16.9	35.2
LEATHERMAN PASS	9860	3/31/88	48	15.2	18.6	26.8	PLACER CREEK	5860	4/01/88	38	12.4	16.4	18.9
LEMHI PASS	7480	3/28/88	30	7.2	8.5	9.4	PRAIRIE	4800	3/30/88	0	.0	.0	2.9
LEMHI RIDGE	8100	3/28/88	40	10.1	11.0	10.8	PRAIRIE PILLOW	4800	4/01/88	---	.0	.0	---
LOLO PASS	5240	3/30/88	68	23.8	19.8	30.7	ROAD CREEK	5380	4/01/88	20	6.9	1.3	8.4
LOLO PASS PILLOW	5240	4/01/88	---	26.2	20.6	33.1	ROBINSON CREEK RIOGE	6220	4/02/88	27	12.0	.0	20.7
LOST LAKE	6110	3/28/88	126	54.6	44.6	59.3	ROCK FLAT SUMMIT	5310	3/26/88	38	12.5	11.6	19.1
LOST LAKE PILLOW	6110	4/01/88	---	46.7	51.6	66.1							
WEISER, PAYETTE AND BOISE BASINS							WATERSHED III						

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
WILLOW, BLACKFOOT, UPPER SNAKE AND PORTNEUF BASINS							WATERSHED V						
SECESEH SUMMIT	6520	3/26/88	67	23.6	21.0	36.8	ASPEN GROVE	6500	4/01/88	---	9.4E	7.8	12.6
SECESEH SUMMIT PILLOW	6520	4/01/88	---	27.5	20.6	37.3	AUSTIN BROTHERS RNCH	6400	3/30/88	17	5.7	4.6	8.8
SOLDIER R.S.	5740	3/27/88	6	1.8	2.2	10.6	BEAVEROAM CREEK	6120	3/27/88	14	5.0	2.7	9.7
SOLOIER R.S. PILLOW	4330	4/01/88	---	2.4	2.2	---	BIG SPRINGS	6400	3/30/88	41	12.9	12.4	21.4
SQUAW FLAT	6240	3/27/88	46	16.2	16.4	27.9	BIRCH CREEK	6800	3/31/88	21	7.3	6.8	11.4
SQUAW FLAT PILLOW	6240	4/01/88	---	16.6	13.2	25.4	BLACK BEAR	7950	4/04/88	97	36.0	20.2	43.2
SQUAW MEADOW	5900	3/26/88	62	23.2	19.8	37.0	BLACK CANYON	7960	4/01/88	---	27.4E	20.2	---
STURCILL RIDGE	6680	4/02/88	42	16.6E	16.0	33.0	BLACK MOOSE	8160	4/01/88	---	31.3E	22.4	40.1
THORSON CABIN	5320	4/01/88	21	7.2	.0	15.3	BLUE LEDGE MINE	6900	4/01/88	38	10.9	10.6	17.5
TRINITY MOUNTAIN	7770	4/01/88	78	29.3	22.5	42.8	BLUE RIDGE	6780	3/31/88	36	13.6	12.6	19.6
TRINITY MTN. PILLOW	7770	4/01/88	---	28.2	22.3	41.3	BONE	6200	3/31/88	18	5.5	2.9	6.8
TRIPPOO SUMMIT	5260	3/26/88	30	12.2	20.4	18.9	BROCKMAN STATION	6430	3/31/88	25	8.9	7.5	9.2
VIENNA MINE	8960	4/01/88	72	24.1	21.1	37.9	CAMP CREEK	6580	3/30/88	18	4.7	6.2	11.6
VIENNA MINE PILLOW	8960	4/01/88	---	25.8	19.1	37.8	COLD SPRINGS	7000	3/26/88	41	14.8	11.4	22.9
WEST BRANCH	5560	3/29/88	42	15.2	11.0	25.6	CRA8 CREEK	6860	4/01/88	36	10.5	9.5	16.7
WEST BRANCH PILLOW	5560	4/01/88	---	16.3	14.4	25.7	CRA8 CREEK PILLOW	6860	4/01/88	---	9.6	8.8	17.2
BIG WOOD, LITTLE WOOD, BIG LOST AND LITTLE LOST BASINS							EAST CREEK	7000	3/27/88	28	8.8	6.7	11.9
WATERSHEO IV							FALL CREEK	6820	3/31/88	13	4.5	5.7	9.7
BEAR CANYON	7900	3/31/88	39	10.6	10.4	19.3	GRASSY LAKE	7270	3/30/88	77	29.2	21.6	36.2
BEAR CANYON PILLOW	7900	4/01/88	---	10.7	8.9	17.3	GRASSY LAKE PILLOW	7270	4/01/88	---	28.5	18.6	37.5
BENNETT MOUNTAIN	6560	3/27/88	35	11.2	8.9	18.1	INDIAN MEADOWS	9420	3/31/88	85	31.1	22.1	38.6
BENNETT MTN. PILLOW	6560	4/01/88	---	11.6	10.3	20.0	IRVING CREEK	7040	3/29/88	18	4.4	5.0	5.8
CAMAS CREEK DIVIOE	5710	3/27/88	4	1.9	.0	10.2	ISLAND PARK	6290	3/30/88	33	11.1	11.3	17.3
CHIMNEY CREEK	6400	3/27/88	16	5.7	5.3	13.4	ISLAND PARK PILLOW	6290	4/01/88	---	12.2	10.2	16.6
COPPER BASIN	7640	3/31/88	16	4.5	4.2	10.5	JACKPINE CREEK	7350	3/31/88	52	17.2	13.6	22.5
COUCH SUMMIT	6840	3/27/88	27	8.9	7.9	18.8	JOHNSON CREEK	6730	3/30/88	32	9.6	8.7	14.3
DOLLARHIOE SUMMIT	8420	4/01/88	51	15.8	14.0	25.4	KILGORE	6320	4/01/88	20	7.2	7.4	11.8
DOLLARHIOE SM PILLOW	8420	4/01/88	---	16.5	14.7	26.0	LATHAM SPRINGS	7630	3/31/88	71	26.1	18.0	33.8
DRY FORK	7220	3/29/88	29	8.5	6.3	16.3	LAVA CREEK	7350	3/31/88	35	11.2	10.1	15.1
FISHPOLE LAKE	9300	3/31/88	46	14.9	13.4	22.1	LOWER PEBBLE	5780	3/26/88	32	11.8	5.4	13.4
GALENA	7440	4/01/88	---	11.9E	10.4	19.0	LUCKY DOG	6860	3/31/88	58	20.4	15.2	34.4
GALENA PILLOW	7440	4/01/88	---	11.9	9.8	18.8	MAISON PLATEAU	7750	4/04/88	65	21.6	14.9	24.1
GALENA NEW	7470	3/29/88	43	13.0	11.3	21.3	MC RENOLDS RESERVOIR	6720	3/31/88	36	12.1	10.7	20.2
GALENA SUMMIT	8780	3/29/88	50	14.6	14.0	24.4	MINK CREEK	6410	4/01/88	32	11.1	10.9	19.2
GALENA SUMMIT PILLOW	8780	4/01/88	---	14.2	12.8	19.6	MUO CREEK	7100	3/31/88	51	17.0	16.1	19.8
GARFIELD R.S.	6560	3/31/88	0	.0	2.5	10.3	PACKSAOOLE SPRING	8200	3/31/88	66	24.2	18.4	30.3
GARFIELD R.S. PILLOW	6560	4/01/88	---	3.1	4.5	10.4	PEBBLE CREEK	6550	3/26/88	29	9.1	7.3	16.4
GRAHAM RANCH	6270	3/29/88	23	6.6	7.1	14.5	PHILLIPS BENCH	8200	3/30/88	78	24.9	20.0	30.5
HILTS CREEK	8000	3/31/88	33	7.9	7.8	11.6	PHILLIPS BENCH PILL.	8200	4/01/88	---	22.6	17.4	29.0
HILTS CREEK PILLOW	8000	4/01/88	---	10.8	8.3	13.5	PINE CREEK PASS	6810	3/31/88	44	14.5	10.2	17.8
HYNOMAN CREEK	7440	3/31/88	27	8.4	8.1	14.5	PUTNAM	7220	3/26/88	35	12.2	10.5	21.4
HYNDMAN PILLOW	7440	4/01/88	---	8.7	8.3	13.2	SAWTELL MOUNTAIN	8720	3/30/88	83	29.1	23.7	36.5
IRON BOG	7650	3/29/88	19	5.4	5.8	13.5	SEOGEWICK PEAK	7850	3/27/88	35	10.0	9.0	18.6
IRON MINE CREEK	6300	3/30/88	13	4.0	4.0	11.1	SHEEP MOUNTAIN	6570	3/31/88	28	9.8	7.8	14.1
LEADBELT	6700	3/29/88	5	1.9	3.9	9.4	SHEEP MTN. PILLOW	6570	4/01/88	---	10.9	8.0	16.6
LEATHERMAN PASS	9860	3/31/88	48	15.2	18.6	24.8	SLUG CREEK DIVIOE	7230	3/28/88	34	11.0	8.8	17.6
LITTLE CAMAS FLAT	4940	3/27/88	0	.0	.0	4.0	SLUG CK OVD. PILLOW	7230	4/01/88	---	13.0	9.1	20.0
LOST-WOOD DIVIOE	7900	3/31/88	47	15.2	12.0	24.0	SOMSEN RANCH	6840	3/30/88	36	10.5	9.5	15.1
LOST-WOOD DVO PILLOW	7900	4/01/88	---	14.3	11.4	25.3	SOMSEN RANCH PILLOW	6800	4/01/88	---	9.7	7.7	14.8
MASCOT MINE	7780	3/31/88	27	7.8	7.2	15.4	STATE LINE	6660	3/31/88	47	13.9	10.4	15.0
MOONSHINE	7440	3/30/88	30	7.5	5.1	10.7	SULPHUR PEAK	7070	3/30/88	32	10.5	9.2	16.9
MOONSHINE PILLOW	7440	4/01/88	---	10.2	6.3	11.4	TARGHEE PASS	6980	4/01/88	---	9.8E	9.8	16.1
MOUNT BALDY	8920	4/01/88	43	13.2	11.0	21.7	TETON PASS W.S.	7740	3/30/88	70	17.8	21.4	26.8
MULOOON	6320	3/31/88	0	.0	1.2	6.9	TEX CREEK	6650	4/01/88	---	6.7E	4.7	10.2
SAWMILL CANYON	7000	3/30/88	18	4.6	4.5	7.9	TOPONCE	6160	3/26/88	23	9.0	5.6	17.1
SOLOIER R.S.	5740	3/27/88	6	1.8	2.2	10.6	VALLEY VIEW	6680	3/30/88	33	10.8	11.0	17.7
SOLOIER R.S. PILLOW	4330	4/01/88	---	2.4	2.2	---	WEBBER CREEK	6700	3/29/88	16	3.8	4.8	6.0
STICKNEY HILL	7430	3/31/88	17	5.1	5.5	10.4	WHISKEY CREEK	6800	4/04/88	53	17.0	13.1	21.8
STICKNEY HILL PILLOW	7430	4/01/88	---	3.8	4.2	9.6	WHITE ELEPHANT	7710	3/30/88	60	20.1	16.0	26.6
SWEDE PEAK	7640	3/31/88	30	8.9	8.4	18.3	WHITE ELEPHANT PILL	7710	4/01/88	---	22.0	16.5	27.8
TELFER RANCH	5840	3/30/88	0	.0	.0	7.0	WILDHORSE DIVIOE	6490	4/01/88	28	9.9	11.0	17.9
VIENNA MINE	8960	4/01/88	72	24.1	21.1	37.9	WILDHORSE OVD PILLOW	6490	4/01/88	---	10.2	9.9	17.4
VIENNA MINE PILLOW	8960	4/01/88	---	25.8	19.1	37.8	WOOD CANYON DIVIOE	7450	3/30/88	37	11.6	9.9	19.8
WET CREEK SUMMIT	7680	3/31/88	33	9.6	6.4	12.8							

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
SOUTHSIDE SNAKE BASIN							WATERSHED VI						
ANTELOPE RIDGE	6180	3/26/88	0	.0	.0	6.3	GREAT BASIN						
BADGER GULCH	6560	3/26/88	26	9.0	8.8	13.5	CHRISTENSEN RANCH	5560	3/25/88	16	6.0	.0	8.1
BATTLE CREEK AM	5720	4/05/88	0	.0	.0	1.7	CLIFF CANYON	7200	3/25/88	8	3.4	1.8	10.5
BEAR CREEK	7800	3/31/88	59	19.6	17.2	22.2	CUB RIVER R.S.	5450	3/25/88	9	3.5	3.7	7.3
BEAR CK SNOTEL	7800	4/01/88	---	18.5	14.3	33.9	DANIELS CREEK	6270	3/25/88	11	3.6	2.2	5.2
BIG BEND	6700	4/01/88	18	6.0	4.0	9.0	DRY BASIN	7820	3/25/88	53	18.0	15.6	30.6
BOSTETTER R.S.	7500	3/26/88	48	16.4	12.2	20.6	DRY CREEK FLAT	6360	3/25/88	5	2.0	.0	5.8
BOSTETTER RS PILLOW	7500	4/01/88	---	12.0	10.1	18.7	EMIGRANT SUMMIT	7390	3/30/88	47	16.3	12.1	25.9
BOY SCOUT CAMP	7740	3/26/88	39	13.6	11.0	17.0	EMIGRANT CANYON	6500	3/30/88	22	7.4	6.2	11.1
BULL BASIN AM	5460	4/05/88	0	.0	.0	.6	FRANKLIN BASIN	8020	3/25/88	53	17.8	15.4	28.3
CEDAR CREEK	6820	3/31/88	26	8.9	6.6	10.5	FRANKLIN BSN PILLOW	8040	3/25/88	61	19.6	17.4	31.8
CLEAR CREEK MEADOWS	9420	3/26/88	54	17.0	17.4	24.1	GIVEOUT	6860	3/28/88	38	10.5	7.7	13.2
DEADLINE	7400	3/31/88	33	11.4	12.6	22.9	GIVEOUT PILLOW	6840	4/01/88	---	11.0	4.9	14.4
DEADLINE SOUTH	7450	3/31/88	48	16.9	20.9	25.1	LIBERTY SPRING	8600	3/25/88	74	27.1	21.0	40.2
FOX CREEK	6800	3/31/88	34	11.1	8.3	10.5	LITTLE BEAVER	6790	3/28/88	43	13.2	8.6	16.2
FRY CANYON	6700	3/28/88	2	.1	3.8	6.9	LOWER ELKHORN	6960	3/25/88	18	6.9	5.1	14.0
GEORGE CREEK	8840	3/26/88	49	15.0	16.2	23.2	LOWER HOME CANYON	7640	3/29/88	34	9.7	7.8	14.7
GOAT CREEK	8800	3/31/88	62	17.4	14.3	19.2	OXFORD MOUNTAIN	6800	3/25/88	11	3.9	2.7	9.6
GOLD CREEK	6600	3/28/88	6	1.7	.9	5.3	OXFORD SPRING	6740	3/25/88	14	4.5	2.5	10.7
HOWELL CANYON	7980	3/26/88	57	21.0	18.4	26.7	STRAWBERRY CREEK	5820	3/30/88	16	5.7	.0	10.7
HUMMINGBIRD SPRINGS	8950	3/31/88	76	23.5	18.6	24.7	STRAWBERRY-MINK DVD	6720	3/25/88	41	14.3	9.5	22.4
HYDE PASTURE AM	5760	4/05/88	0	.0	.1	3.5	UPPER ELKHORN	7140	3/25/88	39	10.9	8.8	19.7
INDIAN GROVE	7560	3/26/88	28	8.6	7.8	13.1	UPPER HOME CANYON	8560	3/29/88	52	16.4	15.2	25.1
JACK CREEK, LOWER	6800	3/28/88	4	.2	1.4	3.3	WILLOW FLAT	6070	3/25/88	29	10.8	6.9	15.5
JACKS PEAK	8420	3/28/88	58	17.6	17.1	26.8	WORM CREEK	6620	3/25/88	32	11.7	10.3	20.2
JOHNSTON POND	6700	4/05/88	0	.0	.1	---							
LANGFORD FLAT CREEK	5980	3/31/88	10	3.6	.0	5.2							
LAUREL DRAW	6700	3/28/88	22	8.3	6.8	8.4							
LOGGER SPRINGS	8120	3/26/88	49	14.8	12.8	19.7							
LOOKOUT BUTTE AM	5650	4/01/88	0	.0E	.0	.0							
LOUSE CANYON AM	6440	4/01/88	0	.0E	8.0	5.6							
MAGIC MOUNTAIN	6880	3/31/88	47	15.8	11.2	20.1							
MAGIC MTN PILLOW	6880	4/01/88	---	16.2	10.6	20.1							
MUD FLAT	5730	3/26/88	2	.8	3.6	5.3							
MUD FLAT PILLOW	5730	4/01/88	---	.0	.0	4.8							
ONE MILE SUMMIT	7330	3/26/88	11	3.8	3.2	7.7							
OREGON CANYON AM	6950	4/01/88	0	.0E	3.8	5.8							
POLE CREEK R.S.	8330	3/31/88	64	20.6	17.4	22.0							
QUINN RIDGE AM	6300	4/05/88	0	.0	4.3	1.1							
RED CANYON AM	6650	4/05/88	0	.0	4.3	6.0							
RODEO FLAT	6800	3/28/88	8	2.0	5.5	6.4							
SEVENTYSIX CRFEK	7100	3/28/88	25	8.4	8.7	12.6							
SEVENTYSIX CK SNOTEL	7100	3/28/88	19	6.2	6.8	---							
SHOSHONE BASIN	5810	3/31/88	---	3.4E	.0	4.9							
SILVER CITY	6400	3/29/88	33	11.9	11.6	16.0							
SOUTH MOUNTAIN	6500	3/26/88	28	11.2	7.5	14.7							
SUBLETT	5950	3/26/88	26	8.8	5.8	11.3							
TAYLOR CANYON	6200	3/28/88	1	.1	.0	3.7							
VAUGHT RANCH AM	5830	4/05/88	0	.0	.0	1.7							
VIPONT	7670	3/26/88	33	10.2	9.8	16.5							
WILSON CREEK	7500	3/31/88	38	13.2	10.2	13.4							
WATERSHED VII													

The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State	Idaho Department of Water Resources Soil and Water Conservation Districts of Idaho
Federal	U.S. Department of Agriculture Forest Service U.S. Department of Army Corps of Engineers U.S. Department of Commerce NOAA, National Weather Service U.S. Department of Interior Bureau of Reclamation Geological Survey, Water Resources Division Shoshone-Bannock Tribal Council
Local	Big Lost River Irrigation District Big Wood Irrigation Company Boise Project Board of Control Idaho Water District #01 Lewiston Orchards Irrigation District Little Wood River Irrigation District North Board of Control — Owyhee Project Salmon Falls Irrigation Company South Board of Control — Owyhee Project
Private	Cyprus Mining Company FMC Corporation Idaho Power Company Le Bois Resort Washington Water Power Company

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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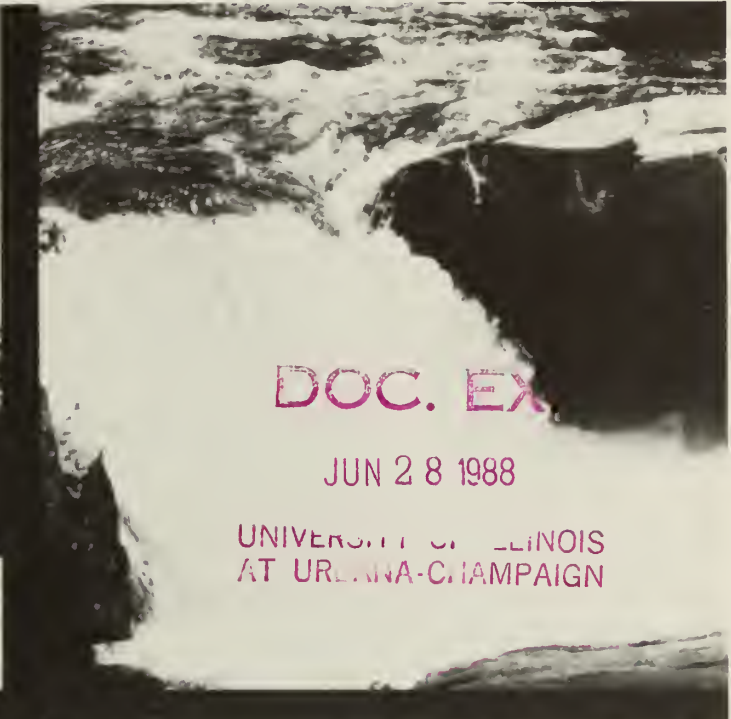
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Conservation
Service

Boise,
Idaho



Idaho Water Supply Outlook

May 1, 1988



DOC. EX.

JUN 28 1988

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN



Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are terms reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola, Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Denver, CO 80211
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 87102-3157
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97204
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201-1080
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209.

Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Idaho Water Supply Outlook

and

Federal — State — Private Cooperative Snow Surveys

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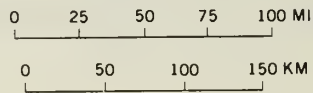
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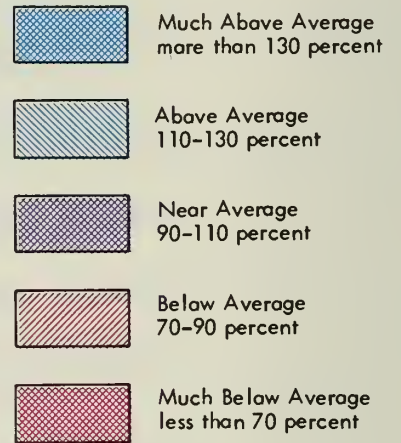
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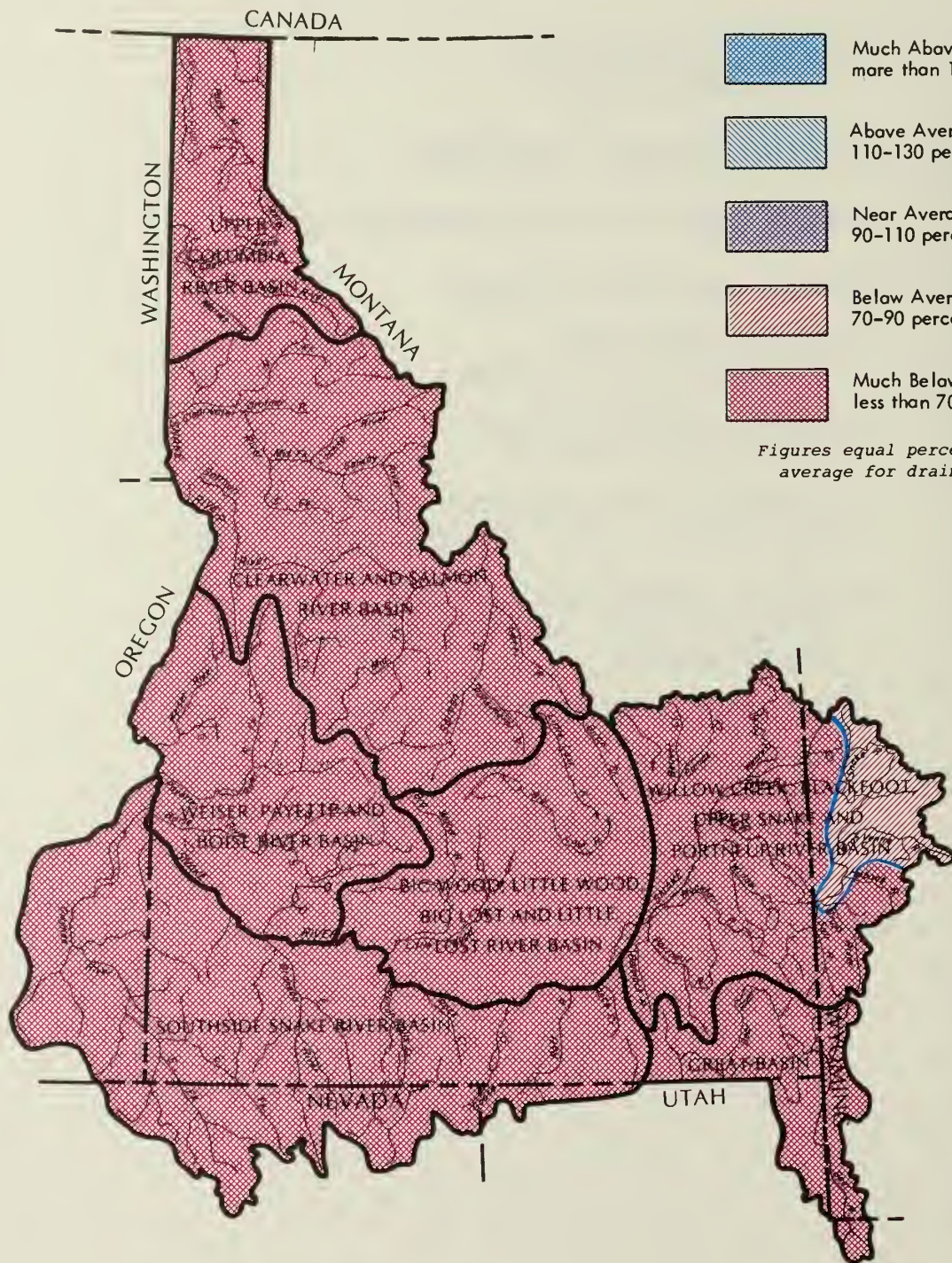
STREAMFLOW PROSPECTS IDAHO



LEGEND



Figures equal percent of
average for drainage.



GENERAL OUTLOOK

SUMMARY:

APRIL BROUGHT NEAR TO WELL ABOVE NORMAL PRECIPITATION TO MOST OF IDAHO. UNFORTUNATELY, MOST OF THIS PRECIPITATION WAS IN THE FORM OF RAIN OR WET SNOW WHICH MELTED WITHIN A FEW DAYS AND DID LITTLE TO IMPROVE SNOWPACK CONDITIONS. HOWEVER, THE RAIN WAS A WELCOME RELIEF IN AGRICULTURAL VALLEYS WHERE IT IMPROVED SOIL MOISTURE CONDITIONS AND REDUCED IRRIGATION DEMANDS. ABOVE NORMAL TEMPERATURES IN THE MIDDLE OF APRIL PRODUCED HIGH SNOWMELT RATES AND SNOWPACK CONDITIONS DETERIORATED SIGNIFICANTLY. DRY SOILS ABSORBED MUCH OF THE SNOWMELT AND RAINFALL, SO STREAMFLOWS REMAINED NEAR OR BELOW NORMAL FOR THE MONTH. STREAMFLOW FORECASTS FOR THE REMAINDER OF THE SPRING AND SUMMER REMAIN WELL BELOW NORMAL, PARTICULARLY IN THE LOWER ELEVATION BASINS.

SNOWPACK:

May 1 snow surveys taken at selected sites show the mountain snowpack is well into the melt phase. Approximately 40% of the winter's accumulation has melted since April 1, and most lower elevation basins have lost nearly all of their snowpack. This early melt is due to an unusually warm period April 10-18. Cooler than normal temperatures followed this period, bringing snowmelt at high elevations to a standstill. In northern Idaho, snowpack conditions range from 54 to 75% of normal in the higher elevations. Snowpacks in the central Idaho mountains now range from 31 to 57% of normal. The higher elevations of eastern Idaho report 60 to 75% of average snowpack. In southern Idaho, high elevation snowpacks range from 30 to 73% of normal. Lower elevation snowpacks throughout the state have melted or are nearly melted. If above average temperatures return during May, nearly all of the mountain snowpack will be depleted by June 1.

PRECIPITATION:

The wet pattern that began in March continued in April as a series of storms brought normal to well above normal precipitation to almost all of the state. Only the southeast corner recorded below normal amounts. A particularly wet storm from April 19 through April 21 produced heavy amounts of rain and some snow, and this was the major producer of precipitation for the month. The state averaged about 130% of normal for the month. A breakdown of percentages by area shows the central and northern sections of the state ranged from 99% at Lewiston to 178 at Kellogg. Southwest Idaho also did well during the month with Boise at 151% of normal and Parma at 90%. Southcentral Idaho had a range of 239% at Ketchum to 104% at Twin Falls. Ketchum recorded 1.63" of rain in one 48-hour period. Southeast Idaho did not do as well with percentages varying from 95% at Idaho Falls to only 53% of normal at Malad. Areas north of Idaho Falls did much better with Dubois at 240% and Ashton at 150% of normal. Temperatures for the month were typical of spring with several periods of above normal temperatures followed by several days of unusually cool weather. One extended period of above normal temperatures did occur in mid-April and several record high temperatures were set during that time. Overall, the state averaged above normal for the month with Salmon the warmest at a plus 5.4 degrees. Bonners Ferry, Boise, and Pocatello were all about 4 degrees above average. Lewiston reported 3.2 degrees above normal, while Twin Falls was only 1.5 degrees above average.

RESERVOIRS:

Reservoir storages across the state vary from only 34% of normal for May 1 in Magic Reservoir to 174% in Brownlee. Most reservoir operators are trying to store as much water as possible in anticipation of the low runoff volumes expected. Trouble spots in the state include Oakley Reservoir, with 55% of normal storage and only 28% of capacity; Salmon Falls at 74% of normal and 33% of capacity; Owyhee with only 45% of average storage and 38% of capacity; and Magic at 34% of normal and only 30% full. The four reservoir Boise system is currently at 76% of normal storage and 55% of capacity. Most of these reservoirs are not expected to fill this year. Water users are encouraged to stay in touch with their local reservoir company for more information about their particular water supply.

STREAMFLOW:

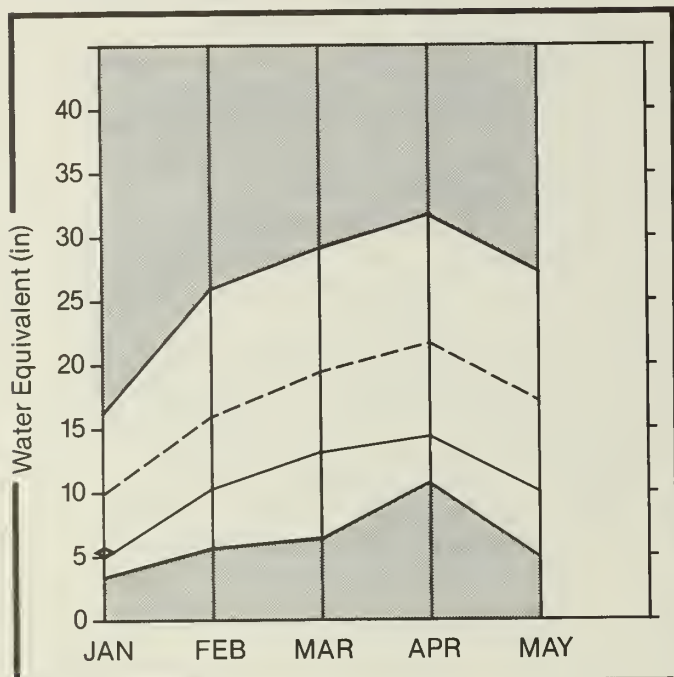
Dry soils absorbed much of the precipitation that occurred during April. Streamflows began to rise with the heavy snowmelt near the middle of April, but quickly receded with the cooler weather in the last 12 days of the month. As a result, streamflow conditions for April generally remained near or below normal across the state. Streamflow projections for the remainder of the irrigation season are below to well below normal throughout Idaho, with the lowest forecasts being found in southcentral and southwestern Idaho and the lower elevation basins in eastern Idaho. May-July forecasts now range from 31% to 71% of normal. In northern Idaho, forecasts range from 33 to 69% of normal. In central and southcentral Idaho, forecasts range from only 31% to 60% of normal. Streamflow projections in the eastern part of the state range from 61% to 70% of normal on the higher elevation basins and 40 to 46% on the lower basins. Assuming near normal temperature conditions prevail over the state during May, peak flows are expected to occur between the middle and end of May.

RECREATIONAL OUTLOOK:

Cool temperatures and near normal or above normal precipitation throughout the state during April have added to the positive outlook for spring and summer whitewater rafting prospects. Peak flows on most Idaho streams are predicted for late May/early June and should be above last year's peak flows. With the exception of the Murtaugh stretch of the Snake River and the Owyhee River system of southwestern Idaho, whitewater enthusiasts can expect more water than last year. Cool weather in May and June would also add to the prospect for higher flows over a longer period.

Upper Columbia Basin

Mountain snowpack* (inches)



*Based on selected stations

Maximum



Average



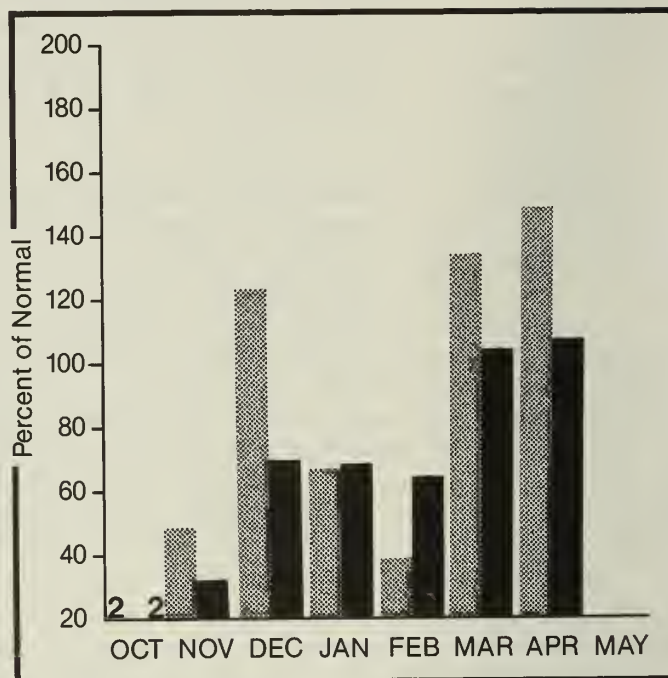
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

May 1 snow measurements show a deterioration in snowpack conditions since the first of April, even though precipitation was well above normal. Most snowpack below 4800 feet elevation has been depleted and higher elevation snowpacks are generally 55 to 65% of normal. This reduction in snowpack is primarily the result of high snowmelt rates during the April 10-18 period, and the month's precipitation falling in the form of rain or wet snow which dissipated quickly. The snowmelt and above normal precipitation improved soil moisture conditions within the basin, and brought improved streamflows with the Spokane at Post Falls reporting 85% of normal flow during April. Water supply forecasts for the May-July period range from 33% to 70%. Reservoir storage levels also improved during April and range from 78 to 119% of normal. Most storage systems are expected to fill as the remaining snow melts and water supplies should be adequate to meet user demands throughout the basin.

UPPER COLUMBIA RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
KOOTENAI at Leona *	MAY-SEP	7687.0	5370.0	70	6680.0	87	3990.0	52
	MAY-JUL	6586.0	4560.0	69	5680.0	86	3380.0	51
CLARK FORK at White Horse Rapids *	MAY-SEP	11760.0	7450.0	63	9450.0	80	5450.0	46
	MAY-JUL	10540.0	6620.0	63	8410.0	80	4830.0	46
PEND OREILLE LAKE inflow *	MAY-SEP	12960.0	7740.0	60	9810.0	76	5540.0	43
	MAY-JUL	11680.0	6920.0	59	8790.0	75	4930.0	42
PRIEST RIVER at Priest *	MAY-SEP	715.0	335.0	47	500.0	70	180.0	25
SPOKANE at Post Falls *	MAY-SEP	1957.0	1010.0	52	1700.0	87	310.0	16
	MAY-JUL	1859.0	945.0	51	1580.0	85	370.0	20
ST. JOE at Calder	MAY-SEP	1008.0	520.0	52	805.0	80	320.0	32
	MAY-JUL	938.0	565.0	60	740.0	79	350.0	37
COEUR D' ALENE at Enaville	MAY-SEP	543.0	192.0	35	420.0	77	81.0	15
	MAY-JUL	503.0	165.0	33	370.0	74	100.0	20

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
HUNGRY HORSE	3451.0	1019.0	2665.0	2040.0	Kootenai ab Bonners Ferry	53	108 64
FLATHEAD LAKE	1791.0	864.0	944.8	929.0	Pend Oreille River	157	149 61
PEND OREILLE	1155.0	953.4	555.0	920.7	Clark Fork River	107	181 61
NOXON RAPIDS	335.0	275.6	329.1	186.3	Priest River	5	77 54
COEUR D'ALENE	222.8	248.2	281.2	317.2	Rathdrum Creek	0	0 0
PRIEST LAKE	97.7	88.8	99.8	74.4	Hayden Lake	0	0 0
					Coeur d'Alene River	9	141 43
					St. Joe River	7	131 65
					Spokane River	16	134 55
					Palouse River	0	0 0

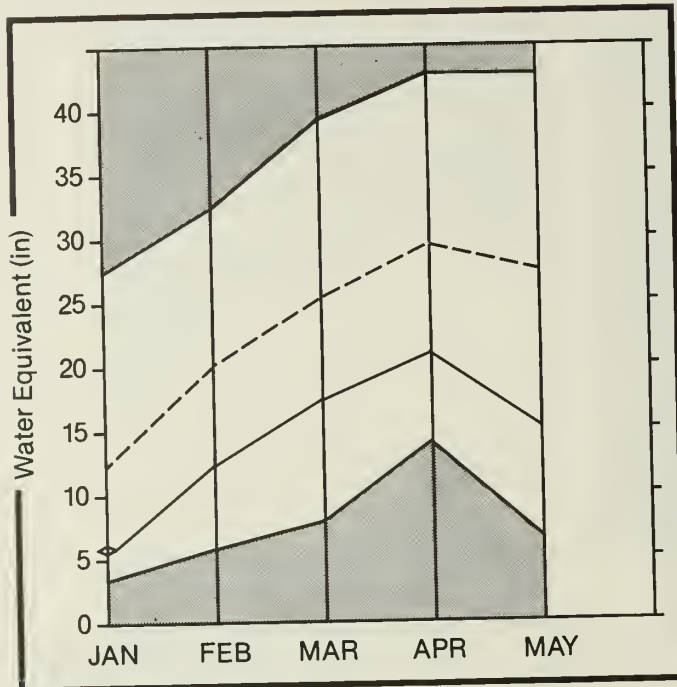
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

Clearwater and Salmon River Basin

Mountain snowpack* (inches)



*Based on selected stations

Maximum



Average



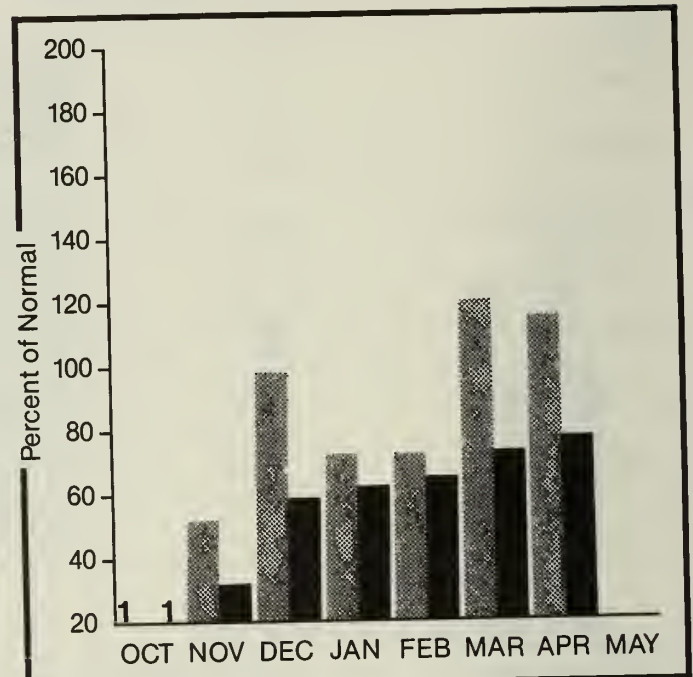
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

April brought above to much above normal precipitation to both the Clearwater and Salmon River basins. Much of this precipitation, however, was in the form of rain or wet snow which melted quickly. Coupled with high snowmelt rates near the middle of April, this has resulted in an overall deterioration in snowpack conditions. May 1 snow surveys show basin snowpacks ranging from 52% of normal on the Salmon drainage to 75% on the Selway. Low elevation snowpacks have dissipated, middle elevation snowpacks generally range from 40-60% of average, and high elevations generally have 65 to 80% of normal snow. May-July streamflow projections range from 52% to 59% of average. Peak streamflow discharges are expected to occur in mid to late May, assuming near normal weather patterns during the month. Dworshak reservoir storage improved during the month to 110% of average, but this is only 72% of capacity. Releases to meet downstream needs will prevent filling Dworshak to capacity.

CLEARWATER AND SALMON RIVER BASIN

STREAMFLOW FORECASTS

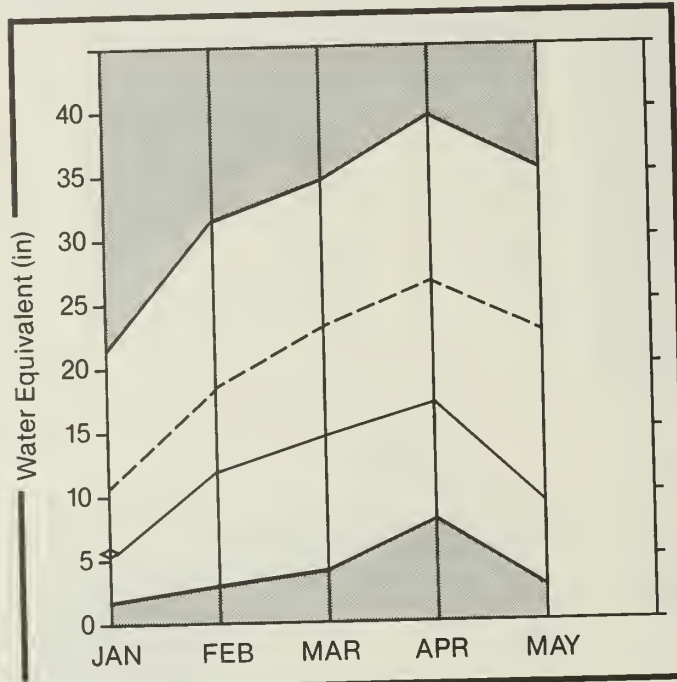
FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
CLEARWATER at Orofino	MAY-SEP	4318.0	2470.0	57	3460.0	80	1430.0	33
CLEARWATER at Spalding	MAY-SEP	6787.0	3940.0	58	5300.0	78	2580.0	38
	MAY-JUL	6325.0	3740.0	59	5000.0	79	2480.0	39
DWORSHAK RESERVOIR inflow	MAY-SEP	2366.0	1210.0	51	1640.0	69	785.0	33
	MAY-JUL	2179.0	1130.0	52	1520.0	70	740.0	34
SALMON at Salmon	MAY-SEP	984.0	550.0	56	855.0	87	235.0	24
SALMON at Whitebird	MAY-SEP	6363.0	3520.0	55	4600.0	72	2380.0	37
	MAY-JUL	5678.0	3180.0	56	4140.0	73	2160.0	38

RESERVOIR STORAGE					(1000AF)	WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF		
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE	
DWORSHAK	3467.8	2499.8	3324.8	2276.0	North Fork Clearwater	14	137	62	
					Lochsa River	5	173	71	
					Selway River	6	189	75	
					Clearwater River	21	154	66	
					Salmon River ab Salmon	6	238	57	
					Lemhi River	3	329	74	
					Salmon River Total	21	249	52	

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
 2 - Corrected for upstream diversions or changes in reservoir storage.
 The average is computed for the 1961-85 base period.

Weiser, Payette, and Boise River Basin

Mountain snowpack* (inches)



*Based on selected stations

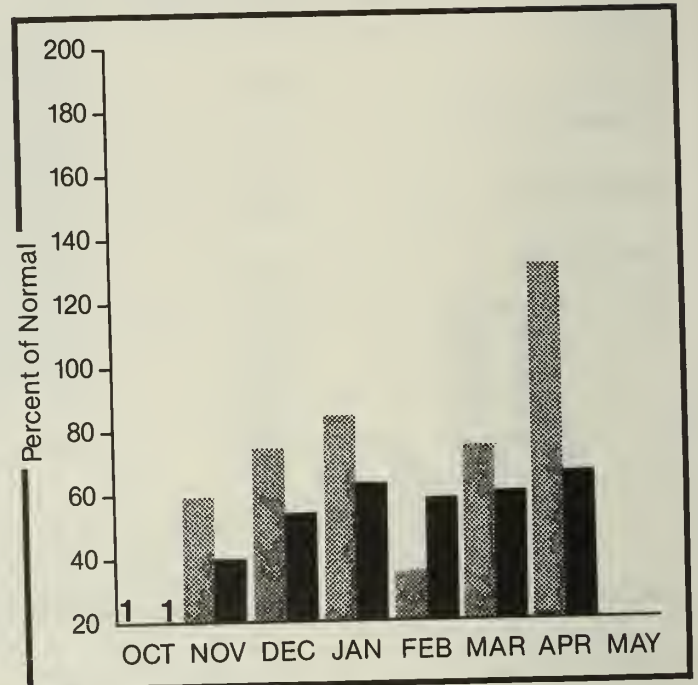
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

Precipitation during the past month was generally above to much above normal over the basin for the first time this water year, which began October 1, 1987. Most of the precipitation fell in the form of rain or wet snow which melted quickly and did little to improve snowpack conditions. High snowmelt rates near the middle of April resulted in May 1 snowpack conditions showing a significant decrease since the first of April. Most snowpack below 5500 ft. elevation is now depleted. May 1 snowpacks range from 31 to 56% of normal on the higher elevation basins of the Payette and Boise, while the Weiser basin is nearly melted out - reporting only 7% of normal snowpack. Dry soils under the snow absorbed much of the snowmelt and precipitation during the month and streamflows remained near to well below average for April. May-July streamflows are forecast to be well below normal, ranging from only 36% of average on the Weiser at Weiser to 48% on the Boise River nr Twin Springs. Reservoir storage levels improved slightly during the month, but generally remain below normal and most reservoirs will not fill to capacity.

WEISER, PAYETTE AND BOISE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
WEISER at Weiser	MAY-JUL	272.0	97.0	36	192.0	71	27.0	10
PAYETTE nr Horseshoe *	MAY-SEP	1551.0	705.0	45	1020.0	66	385.0	25
	MAY-JUL	1406.0	645.0	46	885.0	63	405.0	29
NF PAYETTE at Cascade *	MAY-SEP	479.0	210.0	44	300.0	63	125.0	26
	MAY-JUL	441.0	200.0	45	280.0	63	120.0	27
NF PAYETTE nr Banks *	MAY-SEP	601.0	250.0	42	365.0	61	136.0	23
	MAY-JUL	557.0	240.0	43	345.0	62	135.0	24
SF PAYETTE at Lowman	MAY-SEP	463.0	215.0	46	295.0	64	135.0	29
	MAY-JUL	404.0	190.0	47	265.0	66	120.0	30
DEADWOOD RESERVOIR inflow	MAY-JUL	129.0	58.0	45	84.0	65	42.0	33
BOISE RIVER nr Twin Springs	MAY-SEP	602.0	280.0	47	375.0	62	185.0	31
	MAY-JUL	544.0	260.0	48	350.0	64	175.0	32
SF BOISE AT Anderson Dam *	MAY-SEP	507.0	210.0	41	300.0	59	119.0	23
SF BOISE at Anderson Dam *	MAY-JUL	466.0	197.0	42	280.0	60	110.0	24
BOISE RIVER nr Boise *	MAY-SEP	1295.0	530.0	41	840.0	65	260.0	20
	MAY-JUL	1175.0	490.0	42	730.0	62	245.0	21

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY ¹	THIS YEAR	** USEABLE STORAGE ** LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
MANN CREEK	11.3	8.6	11.3	10.4	Mann Creek	1	0 0
CASCADE	703.2	442.5	561.2	411.7	Weiser River	4	61 7
DEADWOOD	162.0	89.4	117.8	101.1	North Fork Payette	9	164 31
ANDERSON RANCH	464.2	180.0	416.4	327.2	South Fork Payette	7	183 41
ARROWROCK	286.6	116.0	130.8	214.9	Payette River Total	15	178 36
LUCKY PEAK	307.0	257.6	294.0	182.9	Middle & North Fork Boise	9	208 56
LAKE LOWELL (DEER FLAT)	177.0	127.3	140.1	169.8	South Fork Boise River	8	193 53
					Boise River Total	17	211 46
					Canyon Creek	1	0 0

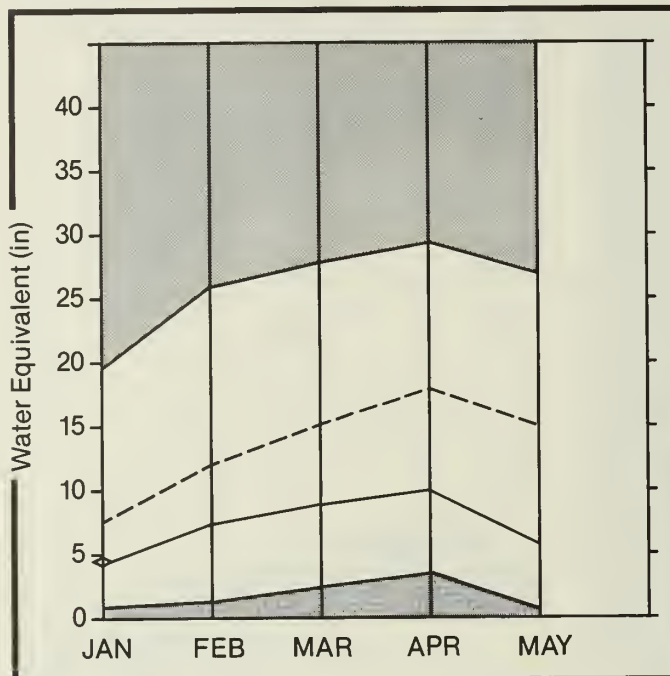
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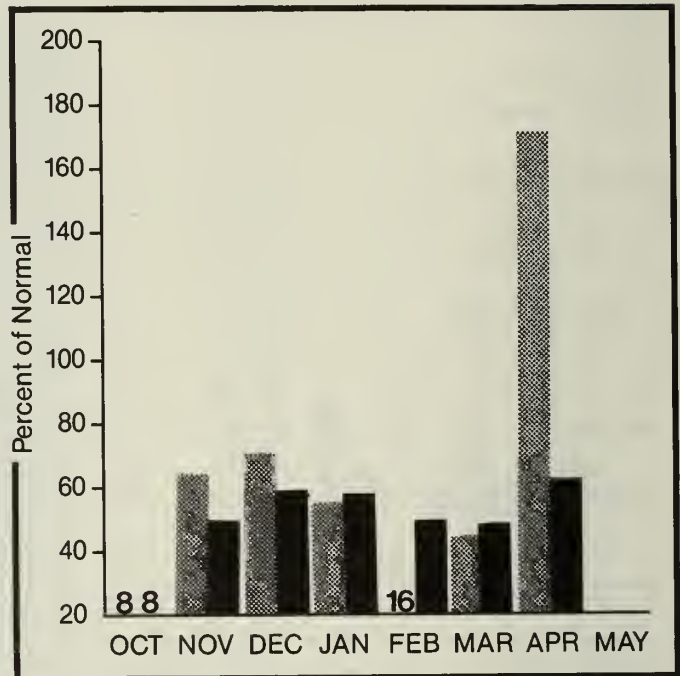
Big Wood, Little Wood, Big Lost, and Little Lost River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum

Average

Minimum

Current

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

Precipitation during April ranged from near to well above average over the basin for the first time since the water year began. Most precipitation came in the form of rain or wet snow which melted quickly. Coupled with high snowmelt rates near the middle of April, this resulted in snowpack conditions showing a significant decrease since April 1. May 1 snowpacks range from 45 to 50% of normal in the higher elevation basins of the Big Wood, Big Lost, and Little Lost. The Little Wood basin shows only 31% of normal snowpack remaining. Snowpack in the Camas Creek drainage is nearly depleted with no sites reporting measurable amounts of snow. May-July streamflow forecasts range from only 32% of normal on Magic Reservoir inflow to 52% on the Little Lost. Reservoir storage levels improved somewhat during the month as most operators released only minimum required amounts of water. Magic Reservoir remains very low at only 34% of average and 30% of capacity. Water will be in short supply on most basins, particularly on the Big Wood/Magic system.

BIG WOOD, LITTLE WOOD, BIG LOST AND LITTLE LOST RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BIG WOOD nr Bellevue	MAY-SEP	190.0	61.0	32	110.0	58	19.0	10
	MAY-JUL	175.0	58.0	33	104.0	59	17.0	10
MAGIC RESERVOIR inflow	MAY-SEP	237.0	74.0	31	150.0	63	23.0	10
	MAY-JUL	221.0	70.0	32	141.0	64	22.0	10
LITTLE WOOD nr Carey	MAY-SEP	79.0	28.0	35	55.0	70	8.0	10
	MAY-JUL	71.0	26.0	37	48.0	68	8.0	11
BIG LOST at Howell Ranch	MAY-SEP	208.0	92.0	44	146.0	70	38.0	18
	MAY-JUL	181.0	81.0	45	128.0	71	34.0	19
BIG LOST nr Mackay *	MAY-SEP	182.0	80.0	44	138.0	76	22.0	12
	MAY-JUL	148.0	67.0	45	114.0	77	20.0	14
LITTLE LOST bl Wet Ck	MAY-SEP	35.2	17.8	51	28.0	80	7.0	20
	MAY-JUL	27.8	14.4	52	23.0	83	6.0	22
LITTLE LOST nr Howe	MAY-SEP	38.0	19.0	50	30.0	79	8.0	21
	MAY-JUL	28.0	14.2	51	23.0	82	6.0	21

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
MAGIC	191.5	57.6	147.9	167.7	Big Wood ab Magic	9	283 45
LITTLE WOOD	30.0	26.7	29.1	24.6	Camas Creek	3	0 0
CAREY VALLEY		NO REPORT			Big Wood Total	11	253 38
MACKAY	44.5	31.8	40.6	34.2	Little Wood River	4	336 31
					Fish Creek	0	0 0
					Big Lost River	5	315 46
					Little Lost River	3	0 50

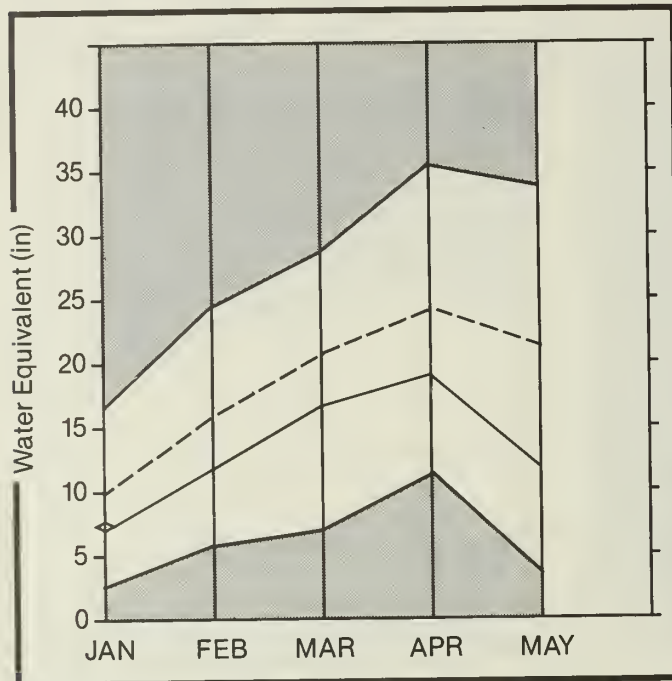
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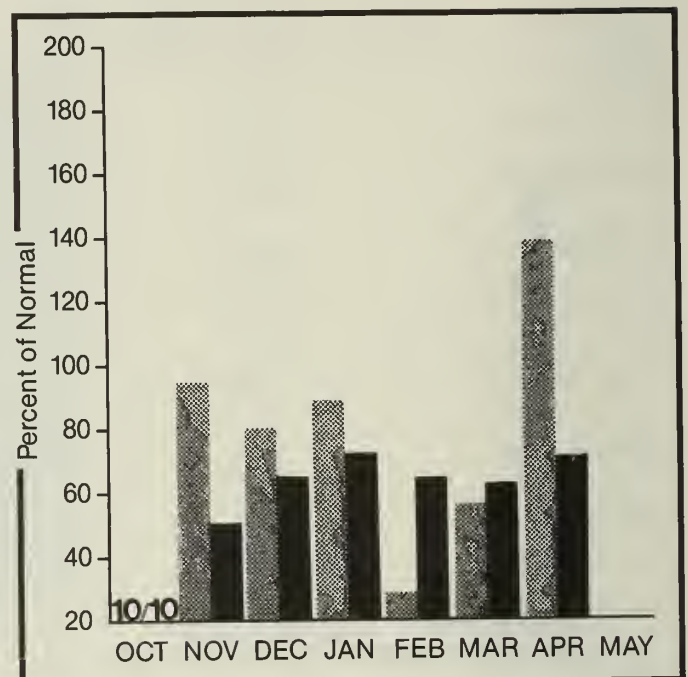
Willow Creek, Blackfoot, Upper Snake, and Portneuf River Basin

Mountain snowpack* (inches)



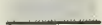
*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum



Average



Minimum



Current



Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

April precipitation, most in the form of rain or wet snow which melted quickly, was near to well above average over most of the basin. Warm temperatures during mid April brought heavy snowmelt to much of the basin, particularly in the lower elevations. As a result, May 1 snow surveys show a significant decline in low elevation snowpack conditions over the past month with the Portneuf, Blackfoot, and Willow Creek drainages being nearly depleted of their winter snow. Snowpack conditions on the Henry's Fork, Teton, and Upper Snake River in Wyoming show moderate declines, but remain in the 60 to 75% of normal range. Streamflow forecasts have been reduced by as much as 15% on the lower basins, while higher basin forecasts show only a slight decrease. Forecasts now range from 46% of normal on the Portneuf at Topaz to 73% on the Snake at Moran. Reservoir carryover storage is good with most reservoirs reporting near or above normal storage. Most reservoirs are expected to fill to capacity with the exception of Ririe and Blackfoot reservoirs. Some water shortages may occur on the lower elevation tributaries to the Snake, and water users on these basins should keep in touch with their local irrigation districts for supply conditions in their area.

WILLOW CREEK, BLACKFOOT, UPPER SNAKE AND PORTNEUF RIVER BASIN

STEAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
HENRY'S FORK nr Ashton *	MAY-SEP	639.0	385.0	60	445.0	70	325.0	51
	MAY-JUL	449.0	275.0	61	310.0	69	240.0	53
HENRYS FORK nr Rexburg *	MAY-SEP	1389.0	850.0	61	1055.0	76	650.0	47
	MAY-JUL	1055.0	655.0	62	790.0	75	500.0	47
FALLS RIVER nr Squirrel	APR-JUL	373.0	250.0	67	305.0	82	194.0	52
TETON RIVER ab S Leigh Ck	MAY-SEP	172.0	107.0	62	145.0	84	69.0	40
	MAY-JUL	123.2	77.0	63	104.0	84	50.0	41
TETON nr St. Anthony	MAY-SEP	434.0	275.0	63	320.0	74	225.0	52
	MAY-JUL	342.0	220.0	64	255.0	75	180.0	53
SNAKE AT Moran *	APR-SEP	888.0	650.0	73	745.0	84	540.0	61
PALISADES LAKE inflow *	APR-SEP	3852.0	2750.0	71	3450.0	90	2060.0	55
SNAKE nr Heise *	MAY-SEP	3790.0	2610.0	69	3410.0	90	1820.0	48
	MAY-JUL	3173.0	2220.0	70	2820.0	89	1550.0	49
SNAKE nr Blackfoot *	MAY-SEP	5243.0	3570.0	68	4360.0	83	2840.0	54
	MAY-JUL	4152.0	2890.0	70	3510.0	85	2240.0	54
PORTNEUF at Topaz	MAY-SEP	78.0	34.0	44	57.0	73	11.0	14
	MAY-JUL	57.0	26.0	46	43.0	75	9.0	16

RESERVOIR STORAGE		(1000AF)			WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE 1 CAPACITY1	** USEABLE STORAGE **	THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
ISLAND PARK	127.6	136.0	135.4	125.7		Camas-Beaver Creeks	1	0 10
GRASSY LAKE	15.2	10.3	14.4	11.5		Henrys Fork River	8	908 60
JACKSON LAKE	624.4	156.7	201.7	494.3		Teton River	9	300 67
PALISADES	1200.0	1119.1	1350.9	871.8		Snake above Palisades	18	184 66
AMERICAN FALLS	1700.0	1641.8	1601.8	1542.9		Snake above Jackson Lake	2	551 72
BROWNLEE	975.3	895.3	948.5	515.9		Gros Ventre River	2	113 75
BLACKFOOT	348.7	279.1	320.5	274.6		Greys River	4	152 73
HENRY'S LAKE	90.4	85.2	87.0	81.8		Salt River	4	0 8
RIRIE	96.5	66.4	69.8	63.5		Willow Creek	6	0 4
						Blackfoot River	3	0 4
						Portneuf River	2	0 0
						Toponce Creek	0	0 0

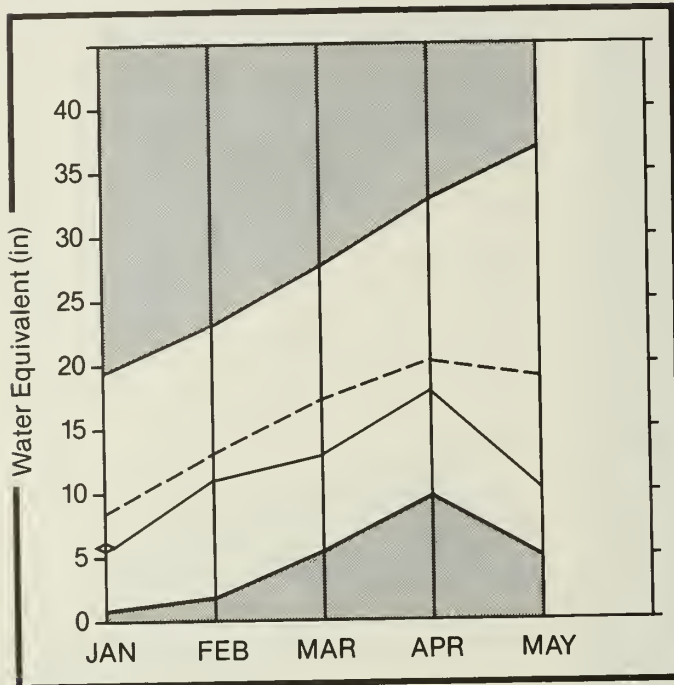
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The average is computed for the 1961-85 base period.

Southside Snake River Basin

Mountain snowpack* (inches)



*Based on selected stations

Maximum



Average



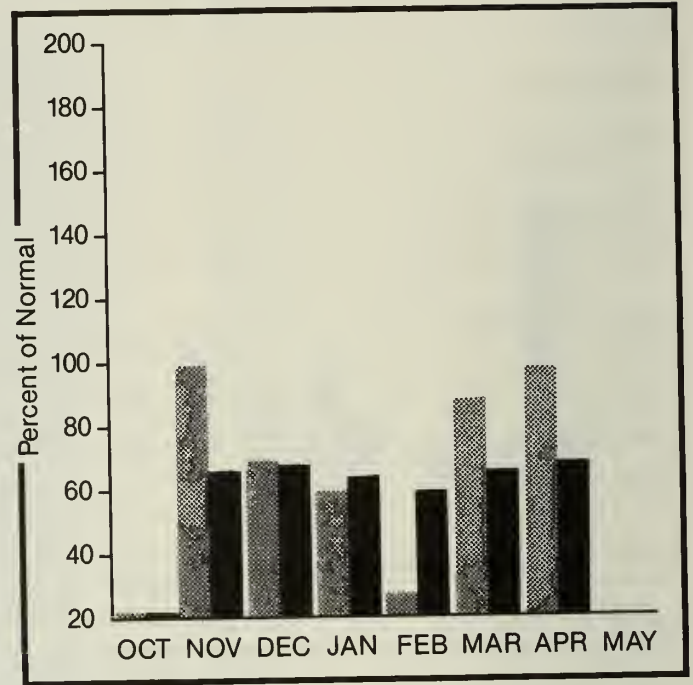
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Mid-April's warm period caused a tremendous decline in the mountain snowpack in the low elevation watersheds of extreme southern Idaho. Salmon Falls Creek basin, for example, dropped from 82% of average snowpack on April 1 to only 46% as of May 1. Precipitation for April was near average for the basin, but the loss of snowpack in April has reduced streamflow forecasts considerably. Volume forecasts now range from 31% of normal for Owyhee Lake Inflow to 60% for Salmon Falls Creek. Reservoir storage is well below normal on Owyhee, Salmon Falls, and Oakley reservoirs, and they are not expected to fill this year. Water users are advised to keep in touch with their local irrigation districts for estimates of the supply available to them.

SOUTHSIDE SNAKE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
OAKLEY RESERVOIR inflow	MAY-SEP	25.0	11.0	44	18.5	74	3.0	12
	MAY-JUL	22.0	10.0	45	16.0	73	3.0	14
SALMON FALLS CK nr San Jacinto	MAY-SEP	67.0	39.0	58	67.0	100	13.4	20
	MAY-JUL	62.0	37.0	60	60.0	97	13.0	21
BRUNEAU nr Hot Springs	MAY-SEP	188.0	98.0	52	168.0	89	30.0	16
	MAY-JUL	176.0	94.0	53	159.0	90	31.0	18
OWYHEE RIVER nr Gold Creek *	APR-JUL	27.8	13.0	47	28.0	101	3.0	11
OWYHEE RIVER nr Owyhee *	APR-JUL	86.0	38.0	44	65.0	76	11.0	13
OWYHEE LAKE inflow *	MAY-SEP	260.0	78.0	30	195.0	75	31.0	12
	MAY-JUL	232.0	72.0	31	165.0	71	30.0	13
OWYHEE at Rome *	MAY-JUL	189.0	64.0	34	149.0	79	15.0	8

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	USEABLE STORAGE THIS YEAR	USEABLE STORAGE LAST YEAR	USEABLE STORAGE AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
OAKLEY	77.4	21.4	34.6	39.2	Raft River	1	135 41
SALMON FALLS	182.6	60.4	101.8	81.4	Goose-Trapper Creeks	1	200 62
OWYHEE	715.0	273.6	523.2	606.9	Salmon Falls Creek	9	202 46
					Bruneau River	5	191 73
					Owyhee River	3	311 39

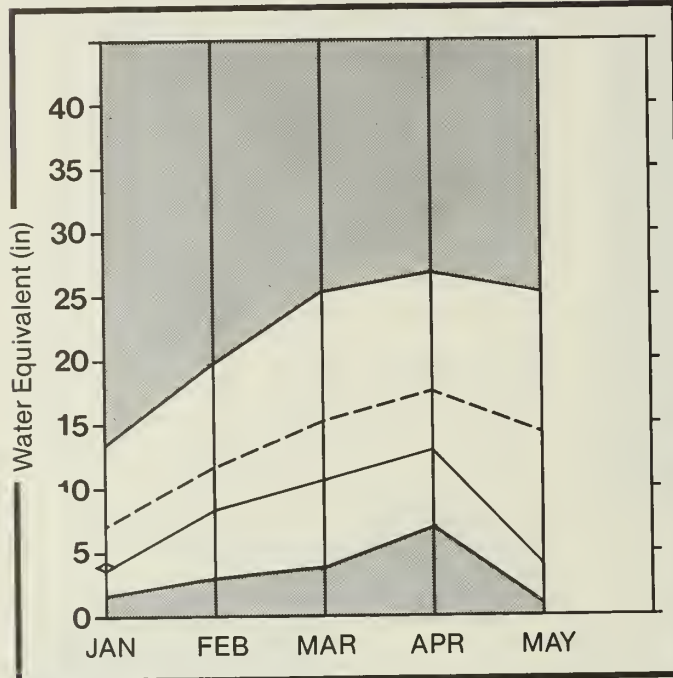
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

Great Basin

Mountain snowpack* (inches)



*Based on selected stations

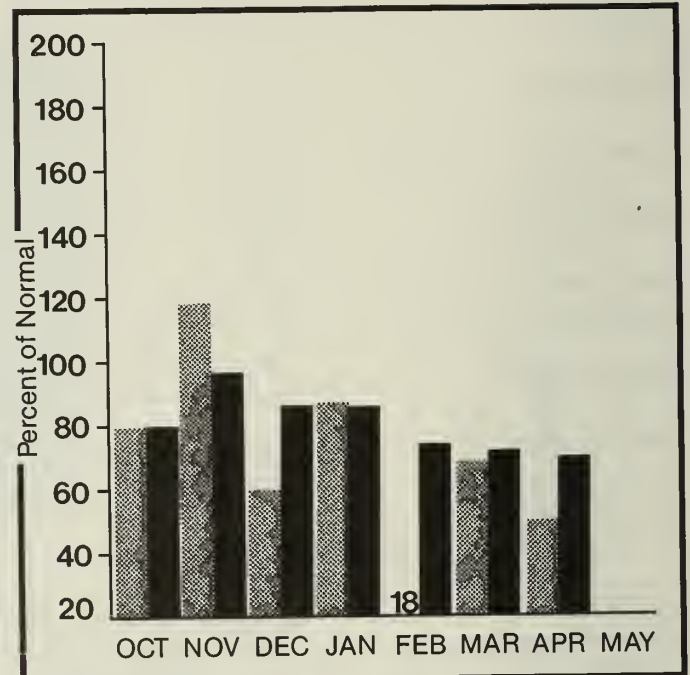
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

Snowpack conditions in the Great Basin have declined significantly since April 1, due to a very warm period in mid-April. Basin snowpack, in percent of normal, currently ranges from 49% in the Bear Lake drainage to 30% in the Montpelier Creek area. The Great Basin was the driest part of the state in April, receiving only 50% of normal rainfall at valley stations. This low precipitation, coupled with the decline in snowpack, has reduced streamflow forecasts from those reported a month ago. Forecasts now range from 39 to 41%. Reservoir storage is slightly above normal, with Bear Lake at 103% of average (77% of capacity), and Montpelier Creek Reservoir at 109% (74% of capacity).

GREAT BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BEAR at Harer	APR-SEP	310.0	138.0	41	199.0	64	77.0	25
MONTPELIER CK nr Montpelier	MAY-SEP	11.3	4.6	41	8.0	71	1.0	9
CUB RIVER nr Preston	MAY-SEP	51.0	20.0	39	38.0	75	5.0	10
	MAY-JUL	46.0	18.5	40	35.0	76	5.0	11

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY ¹	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
BEAR LAKE	1421.0	1096.0	1118.9	1059.0	Bear River (above Harer)	11	138	49
MONTPELIER CREEK	3.4	2.5	3.3	2.3	Montpelier Creek	5	294	30
					Mink Creek	2	1800	34
					Cub River	3	138	46
					Malad River	0	0	0

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

SNOW DATA MEASUREMENTS

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
UPPER COLUMBIA BASIN							WATERSHEO I						
ABOVE BURKE	4100	4/27/88	18	8.0	2.8	18.6	SAVAGE PASS	6170	5/03/88	52	20.0	11.4	27.9
BEAR MOUNTAIN	5400	4/24/88	85	40.4	43.4	63.2	SAVAGE PASS PILLOW	6170	5/01/88	---	18.6	9.1	29.6
BEAR MTN PILLOW	5400	5/01/88	---	50.7	49.2	64.5	SECESH SUMMIT	6520	4/30/88	35	15.4	6.2	34.5
BENTON MEADOW	2370	4/28/88	0	.0	.0	.0	SECESH SUMMIT PILLOW	6520	5/01/88	---	18.3	6.0	34.9
BENTON SPRING	4920	4/28/88	4	1.7	1.6	15.4	SHANGHAI SUMMIT	4570	4/26/88	11	4.6	.0	21.1
BREEZY SAOOLE	5010	4/26/88	29	12.0	8.1	26.9	SHANGHAI SUM PILLOW	4570	5/01/88	---	.8	.0	22.4
COPPER RIOGE	4820	4/27/88	7	3.8	.0	22.2	SHERWIN	3200	4/28/88	0	.0	.0	4.6
FORTY-NINE MEADOWS	4830	4/26/88	26	11.6	4.2	25.1	SHERWIN PILLOW	3200	5/01/88	---	.0	.0	6.8
FOURTH OF JULY SUM	3200	4/27/88	0	.0	.0	.4	SQUAW MEADOW	5900	4/30/88	27	11.8	7.2	34.8
GRANITE PEAK	6000	4/26/88	75	30.6	24.9	46.1	TWIN LAKES	6510	5/01/88	78	34.0	23.8	45.2
HUMBOLOT GULCH	4250	4/27/88	0	.0	.0	13.0	VIENNA MINE	8960	4/27/88	59	25.9	15.4	39.1
HUMBOLOT GLCH PILLOW	4250	5/01/88	---	.0	.0	10.1	VIENNA MINE PILLOW	8960	5/01/88	---	24.8	12.8	40.3
LOOKOUT	5140	4/27/88	38	17.2	13.6	32.7	WEST BRANCH	5560	4/30/88	0	.0	.0	18.6
LOOKOUT PILLOW	5140	5/01/88	---	14.6	11.3	31.3	WEST BRANCH PILLOW	5560	5/01/88	---	.0	.0	20.2
LOST LAKE	6110	4/26/88	91	39.1	35.5	60.1							
LOST LAKE PILLOW	6110	5/01/88	---	38.4	41.6	66.8							
LOWER SANOS CREEK	3120	4/28/88	18	7.6	2.8	16.3							
MOSQUITO RIDGE	5200	5/01/88	---	17.3E	18.2	36.6							
MOSQUITO PILLOW	5200	5/01/88	---	17.0	17.5	37.0							
SCHWEITZER BASIN	6090	5/02/88	81	36.1	38.8	51.1							
SCHWEITZER BN PILLOW	6090	5/01/88	---	39.6	40.3	53.3							
SCHWEITZER BOWL	4800	5/02/88	13	5.0	13.5	24.2							
SCHWEITZER RIDGE	6200	5/02/88	71	31.9	43.0	48.8							
SHERWIN	3200	4/28/88	0	.0	.0	4.6							
SHERWIN PILLOW	3200	5/01/88	---	.0	.0	6.8							
SKITWISH RIDGE	5110	4/27/88	27	13.0	6.4	28.8							
SUNSET	5540	5/01/88	---	20.3E	18.0	32.8							
SUNSET PILLOW	5540	5/01/88	---	22.8	19.7	35.1							
CLEARWATER AND SALMON BASINS							WATERSHEO II						
BANNER SUMMIT	7040	4/27/88	32	14.4	7.9	30.0	ATLANTA SUMMIT	7600	4/27/88	55	22.6	10.3	35.6
BANNER SUMMIT PILLOW	7040	5/01/88	---	12.5	5.9	28.2	ATLANTA SUM PILLOW	7580	5/01/88	---	18.8	8.3	33.1
BEAR BASIN	5350	4/30/88	12	4.0	.0	17.6	ATLANTA TOWNSITE	5370	4/27/88	0	.0	.0	---
BEAR BASIN PILLOW	5350	5/01/88	---	6.9	.0	19.0	BANNER SUMMIT	7040	4/27/88	32	14.4	7.9	30.0
BIG CREEK SUMMIT	6580	4/30/88	52	23.5	9.4	37.6	BANNER SUMMIT PILLOW	7040	5/01/88	---	12.5	5.9	28.2
BIG CREEK SUM PILLOW	6580	5/01/88	---	20.0	10.9	33.9	BAO BEAR	4940	4/29/88	0	.0	.0	5.0
BOULOER CREEK	5440	4/30/88	0	.0	.0	14.6	BEAR BASIN	5350	4/30/88	12	4.0	.0	17.6
BREEZY SADOLE	5010	4/26/88	29	12.0	8.1	26.9	BEAR BASIN PILLOW	5350	5/01/88	---	6.9	.0	19.0
BRUNO CREEK	7920	5/02/88	25	9.8	.0	16.3	BEAR SAOOLE	6180	5/01/88	---	.0E	.0	25.6
BUCK MEADOWS	5650	4/26/88	46	20.0	10.4	27.1	BEAR SAOOLE PILLOW	6180	5/01/88	---	.4	.0	24.6
CAYUSE AIRSTRIP	3500	4/26/88	0	.0	.0	.7	BENNETT MOUNTAIN	6560	5/01/88	---	.0E	.0	11.2
COOL CREEK	6250	4/26/88	94	37.2	30.1	53.2	BENNETT MTN PILLOW	6560	5/01/88	---	.0	.0	14.0
COOL CREEK PILLOW	6280	5/01/88	---	39.1	32.1	52.0	BIG CREEK SUMMIT	6580	4/30/88	52	23.5	9.4	37.6
COOLWATER MOUNTAIN	6030	4/26/88	72	29.8	18.5	35.8	BIG CREEK SUM PILLOW	6580	5/01/88	---	20.0	10.9	33.9
CRATER MEADOWS	5960	4/26/88	66	31.1	24.4	47.0	BOGUS BASIN	6340	5/02/88	11	4.3	.0	22.5
CRATER MOWS PILLOW	5960	5/01/88	---	29.3	18.3	49.9	BOGUS BASIN ROAO	5540	5/02/88	0	.0	.0	.3
CROOKFO FORK	3610	5/03/88	0	.0	.0	2.6	BOULOER CREEK	5440	4/30/88	0	.0	.0	14.6
OEAOWOOD SUMMIT	6860	4/27/88	56	26.5	15.9	45.9	BRUNOAGE RESV PILLOW	4500	5/01/88	---	12.0	2.2	---
OEAOWOOD SUM PILLOW	6860	5/01/88	---	26.9	15.3	55.9	COUCH SUMMIT	6840	4/27/88	0	.0	.0	14.2
ELK BUTTE	5550	4/26/88	23	10.3	2.8	31.5	COZY COVE	5380	4/27/88	0	.0	.0	8.7
ELK BUTTE PILLOW	5550	5/01/88	---	18.4	12.9	38.7	COZY COVE PILLOW	5380	5/01/88	---	.0	.0	11.5
FISH LAKE AIRSTRIP	5650	4/26/88	68	30.4	19.8	40.2	CRAWFORO R.S.	4860	4/30/88	0	.0	.0	.2
FORTY-NINE MEADOWS	4830	4/26/88	26	11.6	4.2	25.1	OEAOMAN GULCH	5600	4/29/88	2	.8	2.2	10.6
GALENA SUMMIT	8780	4/28/88	36	14.4	4.4	25.8	OEAOWOOD AIRSTRIP	5360	5/01/88	---	.0E	.0	7.1
GALENA SUMMIT PILLOW	8780	5/01/88	---	11.5	4.7	21.2	OEAOWOOD SUMMIT	6860	4/27/88	56	26.5	15.9	45.9
GIBBONS PASS	7100	4/29/88	34	15.8	5.8	23.9	OEAOWOOD SUM PILLOW	6860	5/01/88	---	26.9	15.3	55.9
GOAT LAKE	6500	4/26/88	87	39.5	28.7	50.9	OOLLARHIOE SUMMIT	8420	4/27/88	44	16.0	7.1	25.0
GRANITE PEAK	6000	4/26/88	75	30.6	24.9	46.1	OOLLARHIOE SM PILLOW	8420	5/01/88	---	17.0	8.3	25.5
HEMLOCK BUTTE	5810	4/26/88	63	26.4	16.8	50.7	GRAHAM GUARO STATION	5690	4/27/88	0	.0	.0	6.9
HEMLOCK BUTTE PILLOW	5810	5/01/88	---	29.0	19.4	53.0	GRAHAM G.S. PILLOW	5690	5/01/88	---	.0	.0	9.0
HOOOOW BASIN	6050	4/30/88	90	42.6	31.1	53.2	IOAHO CITY TOWNSITE	4000	4/29/88	0	.0	.0	.0
HOOOOW CREEK	5900	4/30/88	80	35.5	27.2	49.3	JACKSON PEAK	7070	4/27/88	41	17.4	8.7	31.4
KIT CARSON PASTURE	4950	4/29/88	0	.0	---	---	JACKSON PEAK PILLOW	7070	5/01/88	---	18.7	9.1	32.2
LEMHI PASS	7480	4/26/88	20	6.4	.8	7.2	LAKE FORK	5290	4/30/88	0	.0	.0	12.7
LEMHI RIDGE	8100	4/26/88	25	7.6	2.8	10.0	MOORES CREEK SUMMIT	6100	4/29/88	38	16.7	3.8	31.7
LOLO PASS	5240	5/03/88	35	15.0	5.4	28.3	MOORES CK SUM PILLOW	6100	5/01/88	---	19.6	4.4	34.3
LOLO PASS PILLOW	5240	5/01/88	---	14.2	4.3	29.5	PRAIRIE	4800	5/01/88	---	.0E	.0	.0
LOST LAKE	6110	4/26/88	91	39.1	35.5	60.1	PRAIRIE PILLOW	4800	5/01/88	---	.0	.0	.0
LOST LAKE PILLOW	6110	5/01/88	---	38.4	41.6	66.8	ROAO CREEK	5380	4/27/88	0	.0	.0	.5
MEADOW LAKE	9150	5/01/88	---	14.3E	5.0	20.9	ROCK FLAT SUMMIT	5310	4/30/88	0	.0	.0	16.9
MILL CREEK SUMMIT	8800	4/29/88	44	16.8	8.0	24.4	SECESH SUMMIT	6520	4/30/88	35	15.4	6.2	34.5
MILL CREEK ST PILLOW	8800	5/01/88	---	16.3	---	22.9	SECESH SUMMIT PILLOW	6520	5/01/88	---	18.3	6.0	34.9
MOONSHINE	7440	4/27/88	5	1.4	---	8.3	SOLOIER R.S.	5740	4/27/88	0	.0	.0	1.4
MOONSHINE PILLOW	7440	5/01/88	---	3.0	.0	10.6	SOLOIER R.S. PILLOW	4330	5/01/88	---	.0	.0	---
MOOSE CREEK	6200	4/29/88	21	7.2	.0	14.4	SQUAW FLAT	6240	4/30/88	13	5.4	8.8	21.1
MOOSE CR PILLOW	6200	5/01/88	---	7.9	.0	14.4	SQUAW FLAT PILLOW	6240	5/01/88	---	6.6	.0	19.1
MORGAN CREEK	7600	4/29/88	8	3.6	.0	12.5	SQUAW MEADOW	5900	4/30/88	27	11.8	7.2	34.8
MORGAN CREEK PILLOW	7600	5/01/88	---	2.5	.0	11.6	TRINITY MOUNTAIN	7770	4/27/88	59	25.9	14.0	43.7
MOUNTAIN MEADOWS	6360	4/26/88	43	16.5	1.7	23.5	TRINITY MTN. PILLOW	7770	5/01/88	---	26.2	13.2	45.4
MOUNTAIN MOWS PILLOW	6360	5/01/88	---	21.3	8.1	27.4	TRIPOO SUMMIT	5260	4/30/88	0	.0	5.0	16.6
NEZ PERCE PASS	6570	4/29/88	20	9.2	.0	15.5	VIENNA MINE	8960	4/27/88	59	25.9	15.4	39.1
PIERCE R.S.	3080	5/01/88	0	.0	.0	---	VIENNA MINE PILLOW	8960	5/01/88	---	24.8	12.8	40.3
ROCK FLAT SUMMIT	5310	4/30/88	0	.0	.0	16.9	WEST BRANCH	5560	4/30/88	0	.0	.0	18.6
SADOLE MOUNTAIN	7940	4/29/88	50	22.2	12.5	28.6	WEST BRANCH PILLOW	5560	5/01/88	---	.0	.0	20.2
							WEISER, PAYETTE AND BOISE BASINS						
							WATERSHEO III						

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
BIG WOOD, LITTLE WOOD, BIG LOST AND LITTLE LOST BASINS							SOUTHSIDE SNAKE BASIN						
WATERSHED IV							WATERSHED VI						
BEAR CANYON	7900	4/27/88	23	8.0	3.3	17.9	BADGER GULCH	6660	4/29/88	0	.0	.0	--
BEAR CANYON PILLOW	7900	5/01/88	---	8.8	4.1	17.2	BEAR CREEK	7800	5/01/88	---	11.8E	3.8	21.5
BENNETT MOUNTAIN	6560	5/01/88	---	.0E	.0	11.2	BEAR CK SNOTEL	7800	5/01/88	---	9.6	2.3	23.2
BENNETT MTN PILLOW	6560	5/01/88	---	.0	.0	14.0	BIG BEND	6700	5/01/88	0	.0E	--	2.8
COPPER BASIN	7640	4/27/88	0	.0	.0	7.5	BOSTETTER R.S.	7500	4/29/88	21	8.4	4.2	13.5
COUCH SUMMIT	6840	4/27/88	0	.0	.0	14.2	BOSTETTER RS PILLOW	7500	5/01/88	---	.3	.0	11.7
DOLLARHIDE SUMMIT	8420	4/27/88	44	16.0	7.1	25.0	CEGAR CREEK	6820	5/02/88	0	.0	--	3.7
DOLLARHIDE SM PILLOW	8420	5/01/88	---	17.0	8.3	25.5	DEAOLINE	7400	5/02/88	0	.0	.0	20.3
FISHPOLE LAKE	9300	4/27/88	47	16.2	6.9	23.6	DEADLINE SOUTH	7450	5/02/88	0	.0	.0	25.1
GALENA	7440	5/01/88	---	.0E	.0	14.5	FRY CANYON	6700	5/01/88	0	.0E	--	1.3
GALENA PILLOW	7440	5/01/88	---	7.0	1.6	20.1	GOAT CREEK	8800	5/02/88	45	16.6	7.3	20.9
GALENA NEW	7470	4/28/88	21	7.9	1.0	20.7	HOWELL CANYON	7980	4/29/88	22	9.7	7.2	23.5
GALENA SUMMIT	8780	4/28/88	36	14.4	4.4	25.8	HOWELL CANYON PILLOW	7980	5/01/88	---	3.7	.0	20.3
GALENA SUMMIT PILLOW	8780	5/01/88	---	11.5	4.7	21.2	HUMMINGBIRD SPRINGS	8950	5/02/88	54	21.6	13.1	27.7
GARFIELD R.S.	6560	4/27/88	0	.0	.0	2.3	JACKS PEAK	8420	5/01/88	---	9.0E	--	28.3
GARFIELD R.S. PILLOW	6560	5/01/88	---	.0	.0	5.5	LANGFORD FLAT CREEK	5980	5/02/88	0	.0	.0	.9
GRAHAM RANCH	6270	4/28/88	0	.0	.0	9.1	LAUREL ORAW	6700	5/01/88	---	2.5E	--	1.3
HILTS CREEK	8000	4/28/88	20	5.8	.0	9.3	MAGIC MOUNTAIN	6880	5/02/88	10	3.8	.0	18.0
HILTS CREEK PILLOW	8000	5/01/88	---	8.7	.5	11.1	MAGIC MTN PILLOW	6880	5/01/88	---	.5	.0	18.0
HYNDMAN CREEK	7440	4/27/88	6	1.8	.0	10.7	MUO FLAT	5730	5/01/88	---	.0E	.0	.2
HYNDMAN PILLOW	7440	5/01/88	---	.0	.0	11.1	MUD FLAT PILLOW	5730	5/01/88	---	.0	.0	.0
LOST-WOOD DIVIDE	7900	4/27/88	28	11.1	1.0	22.4	POLE CREEK R.S.	8330	5/02/88	47	18.8	11.8	23.4
LOST-WOOD DVO PILLOW	7900	5/01/88	---	10.7	.0	26.3	SEVENTYSIX CREEK	7100	5/01/88	0	.0E	--	7.6
MASCOT MINE	7780	4/27/88	14	4.7	.0	15.3	SEVENTYSIX CK SNOTEL	7100	5/01/88	0	.0E	.0	--
MOONSHINE	7440	4/27/88	5	1.4	--	8.3	SHOSHONE BASIN	5810	5/01/88	---	.0E	.0	1.0
MOONSHINE PILLOW	7440	5/01/88	---	3.0	.0	10.6	SOUTH MOUNTAIN	6500	4/30/88	0	.0	.0	8.2
MOUNT BALOY	8920	5/01/88	---	12.7E	--	23.1	SOUTH MTN PILLOW	6500	5/01/88	---	.0	.0	7.2
MULDOON	6320	4/27/88	0	.0	.0	.5	TAYLOR CANYON	6200	5/01/88	0	.0E	--	.7
SAWMILL CANYON	7000	4/28/88	0	.0	.0	4.3	WILSON CREEK	7500	5/02/88	0	.0	--	7.8
SOLOIER R.S.	5740	4/27/88	0	.0	.0	1.4							
SOLOIER R.S. PILLOW	4330	5/01/88	---	.0	.0	--							
STICKNEY HILL	7430	4/27/88	0	.0	.0	6.0							
STICKNEY HILL PILLOW	7430	5/01/88	---	.0	.0	5.4							
SWEDE PEAK	7640	4/27/88	9	3.1	.0	15.6							
SWEDE PEAK PILLOW	7640	5/01/88	---	.0	.0	15.0							
VIENNA MINE	8960	4/27/88	59	25.9	15.4	39.1							
VIENNA MINE PILLOW	8960	5/01/88	---	24.8	12.8	40.3							
WET CREEK SUMMIT	7680	4/28/88	14	4.6	.0	7.4							
WILLOW, BLACKFOOT, UPPER SNAKE AND PORTNEUF BASINS							GREAT BASIN						
WATERSHED V							WATERSHED VII						
ASPEN GROVE	6500	5/01/88	---	.0E	.0	--	CUB RIVER R.S.	5450	4/28/88	0	.0	.0	.4
BEAVERDAM CREEK	6120	4/29/88	0	.0	.0	--	EMIGRANT SUMMIT	7390	4/28/88	23	9.0	.5	23.6
BIG SPRINGS	6400	4/29/88	8	3.6	.0	16.2	EMIGRANT SUM PILLOW	7390	5/01/88	---	9.0	.2	27.3
BIRCH CREEK	6800	4/28/88	0	.0	.0	4.4	EMIGRATION CANYON	6500	4/28/88	0	.0	.0	--
BLACK BEAR	7950	4/27/88	84	36.5	9.8	44.2	FRANKLIN BASIN	8020	4/28/88	30	12.3	8.9	20.7
BLUE LEDGE MINE	6900	5/01/88	---	2.3E	.0	--	FRANKLIN BSN PILLOW	8040	4/28/88	31	13.3	.0	28.0
BLUE RIDGE	6780	4/28/88	0	.0	.0	17.4	GIVEOUT	6860	4/28/88	5	1.4	.0	7.1
BONE	6200	4/28/88	0	.0	.0	1.0	GIVEOUT PILLOW	6840	5/01/88	---	.0	.0	6.0
BROCKMAN STATION	6430	4/28/88	0	.0	.0	--	LITTLE BEAVER	6790	4/28/88	3	1.0	.0	9.9
COULTER CREEK PILLOW	7020	5/01/88	---	4.2	.0	18.3	LOWER HOME CANYON	7640	4/28/88	4	1.4	.0	11.5
COLD SPRINGS	7000	4/30/88	5	1.7	.7	--	OXFORD MOUNTAIN	6800	5/01/88	---	.0E	--	--
CRAB CREEK	6860	5/01/88	---	1.5E	.0	15.7	OXFORD SPRING PILLOW	6740	5/01/88	---	.0	.0	6.7
CRAB CREEK PILLOW	6860	5/01/88	---	1.8	.0	16.2	STRAWBERRY CREEK	5820	4/28/88	0	.0	.0	3.2
EAST CREEK	7000	4/29/88	0	.0	.0	--	UPPER HOME CANYON	8560	4/28/88	40	15.0	6.7	23.8
FALL CREEK	6820	4/28/88	0	.0	.0	--	WILLOW FLAT	6070	4/28/88	0	.0	.0	5.9
GRASSY LAKE	7270	4/29/88	47	23.6	.0	34.9							
GRASSY LAKE PILLOW	7270	5/01/88	---	23.3	4.1	36.4							
INDIAN MEADOWS	9420	4/28/88	69	28.9	.0	38.1							
ISLAND PARK	6290	4/29/88	0	.0	.0	10.3							
ISLAND PARK PILLOW	6290	5/01/88	---	.8	.0	14.3							
JACKPINE CREEK	7350	4/28/88	30	11.9	.0	21.7							
LAVA CREEK	7350	4/28/88	3	1.2	.0	12.1							
LOWER PEBBLE	5780	4/30/88	0	.0	.0	--							
MAOISON PLATEAU	7750	4/27/88	48	20.0	2.5	23.2							
MC RENOLDS RESERVOIR	6720	4/28/88	0	.0	.0	16.3							
MINK CREEK	6410	5/01/88	---	.0E	.0	13.2							
MUD CREEK	7100	4/28/88	23	9.1	--	16.0							
PACKSADDLE SPRING	8200	4/28/88	55	22.2	9.2	29.0							
PEBBLE CREEK	6550	4/30/88	0	.0	.0	--							
PHILLIPS BENCH	8200	4/26/88	73	27.6	16.5	31.1							
PHILLIPS BENCH PILL.	8200	5/01/88	---	23.1	8.4	30.2							
PINE CREEK PASS	6810	4/28/88	11	5.3	.0	12.7							
PUTNAM	7220	4/30/88	8	3.1	.0	--							
SAWTELL MOUNTAIN	8720	4/29/88	72	28.8	--	39.1							
SEDEGWICK PEAK	7850	4/29/88	11	4.7	.3	--							
SHEEP MOUNTAIN	6570	4/28/88	0	.0	.0	9.5							
SHEEP MTN PILLOW	6570	5/01/88	---	.0	.0	10.3							
SLUG CREEK DIVIDE	7230	4/28/88	2	.9	.0	13.5							
SLUG CK DVD PILLOW	7230	5/01/88	---	.7	.0	16.4							
SOMSEN RANCH	6840	4/27/88	3	1.0	.0	12.2							
SOMSEN RANCH PILLOW	6800	5/01/88	---	.0	.0	9.8							
STATE LINE	6660	4/28/88	10	4.2	.0	9.1							
TETON PASS W.S.	7740	4/27/88	59	23.2	13.1	28.3							
TEX CREEK	6650	5/01/88	---	.0E	.0	--							
TOPONCE	6160	5/02/88	0	.0	.0	--							
VALLEY VIEW	6680	4/29/88	2	.5	.0	12.8							
WHISKEY CREEK	6800	4/27/88	26	10.7	.0	18.7							
WHITE ELEPHANT	7710	4/29/88	40	16.8	.0	25.3							
WHITE ELEPHANT PILL	7710	5/01/88	---	20.8	2.6	27.2							
WILDHORSE DIVIDE	6490	5/01/88	---	.0E	.0	12.1							
WILDHORSE DVO PILLOW	6490	5/01/88	---	.3	.0	10.6							

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The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State	Idaho Department of Water Resources Soil and Water Conservation Districts of Idaho
Federal	U.S. Department of Agriculture Forest Service U.S. Department of Army Corps of Engineers U.S. Department of Commerce NOAA, National Weather Service U.S. Department of Interior Bureau of Reclamation Geological Survey, Water Resources Division Shoshone-Bannock Tribal Council
Local	Big Lost River Irrigation District Big Wood Irrigation Company Boise Project Board of Control Idaho Water District #01 Lewiston Orchards Irrigation District Little Wood River Irrigation District North Board of Control — Owyhee Project Salmon Falls Irrigation Company South Board of Control — Owyhee Project
Private	Cyprus Mining Company FMC Corporation Idaho Power Company Le Bois Resort Washington Water Power Company

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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Water Supply Outlook**

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Federal — State — Private
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SOIL CONSERVATION SERVICE

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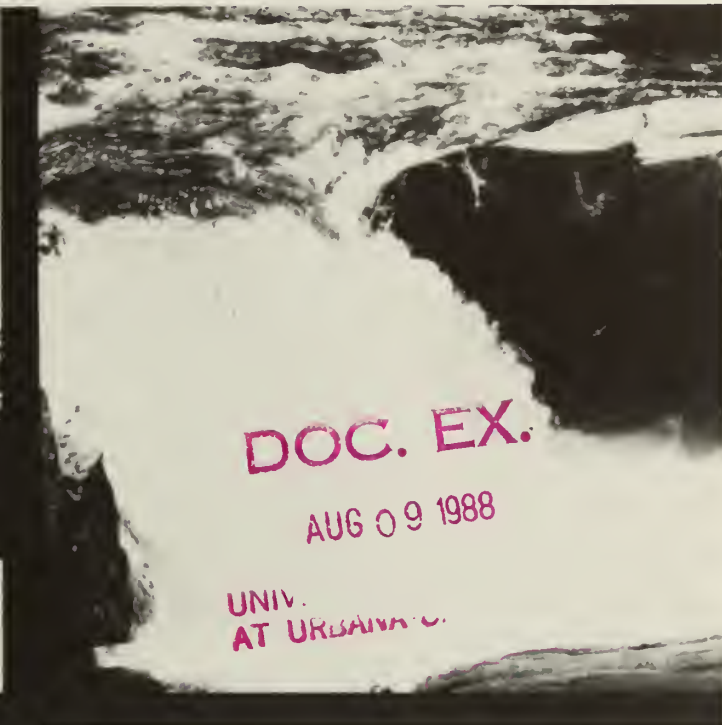
Soil
Conservation
Service

Boise,
Idaho



Idaho Water Supply Outlook

June 1, 1988



Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are terms reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola, Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Denver, CO 80211
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 87102-3157
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97204
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201-1080
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209.

Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Idaho Water Supply Outlook

and

Federal — State — Private Cooperative Snow Surveys

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Soil Conservation Service
Snow Surveys
3244 Elder Street, Room 124
Boise, ID 83705

GENERAL OUTLOOK

SUMMARY:

GOOD PRECIPITATION ACROSS MOST OF IDAHO FOR THE THIRD CONSECUTIVE MONTH IMPROVED THE WATER SUPPLY OUTLOOK FOR THE COMING SUMMER. SNOWMELT PEAK FLOWS IN IDAHO'S MAJOR RIVERS OCCURRED DURING THE LAST WEEK OF MAY. GOOD FLOW VOLUMES SHOULD PERSIST INTO MID-JUNE AS THE LAST OF THE SNOWPACK IS DEPLETED IN THE SNAKE HEADWATERS, BOISE, PAYETTE, AND NORTH IDAHO BASINS. RESERVOIR STORAGE IN SOUTHCENTRAL AND SOUTHWESTERN IDAHO REMAIN VERY LOW, AND WATER USERS ARE ENCOURAGED TO KEEP IN TOUCH WITH THEIR WATER DISTRICTS FOR MORE SPECIFIC INFORMATION.

SNOWPACK:

Snow measurements taken at a limited number of sites near June 1 indicate little of the winter's snowpack remains across the southern two-thirds of the state. In the central Idaho mountains, only scattered snowpack remains on north facing and protected areas above 7500 ft. Eastern & southern Idaho snowpacks are virtually depleted in all basins except in the higher elevations above 8000 ft. Some snow remains in the Teton and Henry's Fork Basins along the Wyoming and Montana borders. Snowpacks in the headwater areas of the Snake River in Wyoming are mostly depleted below the 7500 ft level. Sites above this elevation report 30 to 60% of normal snowpack remaining for June 1. In northern Idaho, conditions look somewhat better with 40 to 80% of normal snowpack remaining above 5500 ft elevation. Cool Creek snow course, located in the Clearwater National Forest, reported 56 inches of snow & 26.8 inches of water still remaining on June 1 for the highest reading in the state. Snowmelt progressed slowly during the first 10 days of May as cool wet weather dominated the state. Warm and dry weather returned to Idaho on May 10th and continued for most of the remainder of the month. On May 27, a slow moving low pressure system entered the state bringing much needed precipitation and cooler temperatures. Snowfall was reported in most parts of the state above 6000 ft with the central Idaho mountains receiving up to 9 inches of new snow. Higher elevation areas in the Jarbidge Range south of Twin Falls received as much as 15 inches of snow containing 4 inches of water during the 3-4 day storm period.

PRECIPITATION:

Weather patterns during the month of May were similar to April's patterns. Central Idaho received normal to well above normal precipitation. The perimeters of the state received below normal amounts except in the panhandle, where Porthill received 116% of normal. The northcentral mountains had totals as high as 136% (Pierce), while Lewiston registered only 64%. In southern Idaho, Boise received 110%, Idaho City 108%, but Parma only received 70% of normal rainfall for the month. South central Idaho reported the highest totals in the state, with Twin Falls receiving 170% of average. The southeast corner of the state was the big loser for the second month in a row, with Idaho Falls at only 44% and Aberdeen receiving 50% of average rainfall. Temperatures for the month averaged a little above normal in the north and near normal in the south. Bonners Ferry was the state's hot spot with a 2.1 degree departure above average. Salmon was 1.7 degrees above normal for the month, Boise plus 0.5, and Pocatello plus 0.2 degrees. Twin Falls was the anomaly with a departure of minus 3.0 degrees from May's average temperature.

RESERVOIRS:

Current reservoir levels range from a low of only 16% of average in Magic Reservoir to a high of 128% in Palisades Reservoir, with 24 key reservoirs across the state reporting a combined storage of 94% of average. Storages in eastern Idaho and on the Snake River mainstem look good with levels ranging from 82 to 128% of average and 71 to 105% of capacity. Southcentral and southwestern Idaho reservoirs report the lowest storage levels ranging from only 16% of average (14% of capacity) in Magic Reservoir to 88% of normal in Little Wood Reservoir. Combined storage on the Boise reservoir system is 70% of normal. Other reservoirs with very low levels include Oakley at 43% of normal storage, Salmon Falls at 65%, and Owyhee Reservoir at 38% of normal storage. Most of these reservoirs are now being drafted to meet user demands. Storage levels in the northern part of the state are generally good, ranging from 80 to 99% of average.

STREAMFLOW:

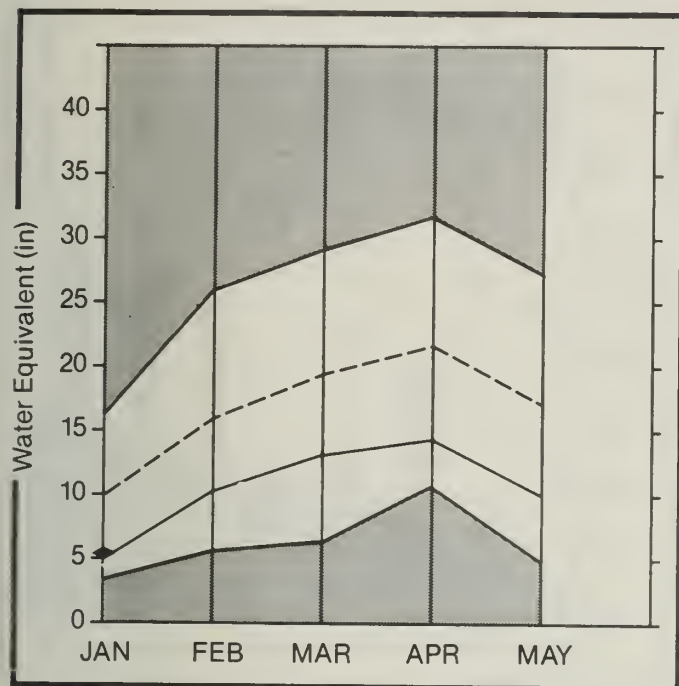
Near to above normal precipitation during May brightened Idaho's water supply picture by improving runoff volumes and reducing user demands. May streamflow volumes, however, remained below to well below normal throughout the state. The lowest streamflow volumes were reported in the lower elevation basins across southern Idaho where flows generally ranged from only 15 to 30% of normal. The higher basins in the central Idaho mountains fared somewhat better during the month but remained well below average, ranging from 45-70% of normal flow. The high elevation basins of northern and eastern Idaho reported the best flows for May, ranging from 65 to 85% of average. Most low elevation streams across southern Idaho reached peak flow conditions in early March and have since receded to low flow conditions. A brief period of above normal temperatures in mid-April produced significant snowmelt and most streams responded with increased flows. However, unusually cool temperatures in late April and early May delayed further snowmelt and runoff until near the middle of May. Moderate temperatures between May 10 and May 27 brought most higher elevation basin streams in Idaho to peak flow conditions between the 25th and 27th of the month. May ended with cooler temperatures and receding streamflows. As of June 1, insufficient snowpacks remain to produce flows higher than those observed in late May. However, the Snake River mainstem, Boise River, Payette River, and most streams in the northern part of the state should maintain good flow volumes until mid-June as the last of the snowpack is depleted.

RECREATIONAL OUTLOOK:

Peak flows on Idaho's major recreational rivers and streams occurred during the last week of May. The cool weather of spring has prolonged Idaho's mountain snowmelt. Therefore, Idaho's major floating streams, the Main and Middle Forks of the Salmon, the Hells Canyon of the Snake, and the Selway, can expect higher levels of water over a longer period of time. As the water levels reach lower flows in July, recreationists may have to adjust launch points on the Middle Fork of the Salmon and the Selway. Otherwise, the summer floating season of 1988 is shaping up to be better than that of 1987.

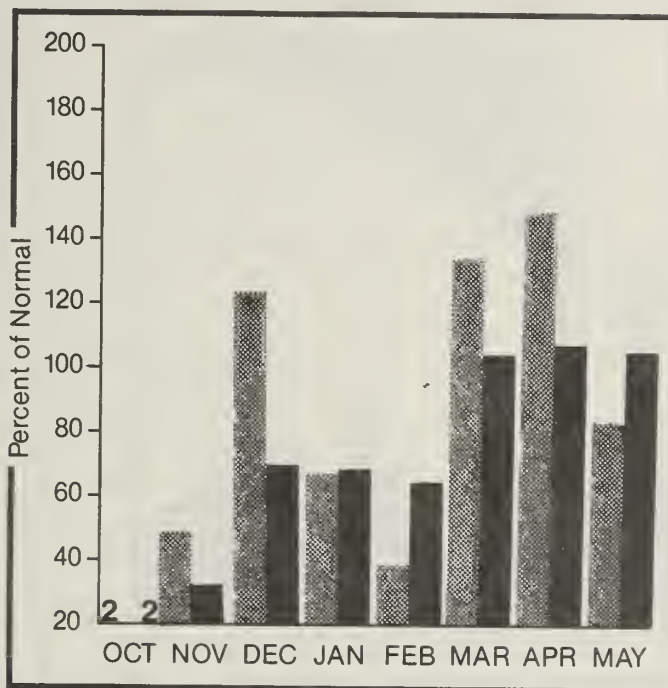
Upper Columbia Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum Average
Minimum Current

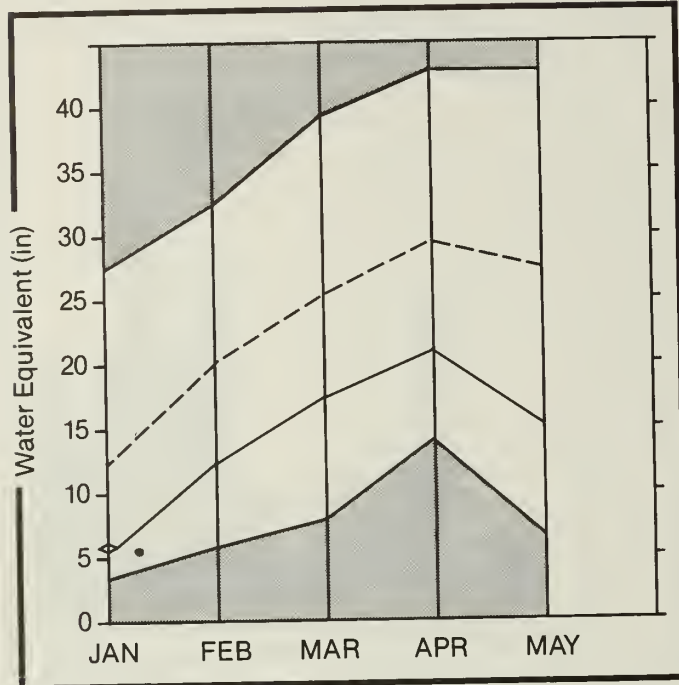
Monthly precipitation Year to date precipitation

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE I CAPACITY I	** USEABLE STORAGE **		
		THIS I YEAR	LAST YEAR	. AVG.
HUNGRY HORSE	3451.0	1630.0	3264.0	2663.0
FLATHEAD LAKE	1791.0	1480.0	1596.0	1468.0
PEND OREILLE	1561.2	1262.3	1405.4	1278.5
NOXON RAPIDS	335.0	321.6	328.0	270.4
COEUR D'ALENE	291.2	282.2	280.2	353.9
PRIEST LAKE	97.7	105.8	99.8	123.5

Clearwater and Salmon River Basin

Mountain snowpack* (inches)



*Based on selected stations

Maximum



Average



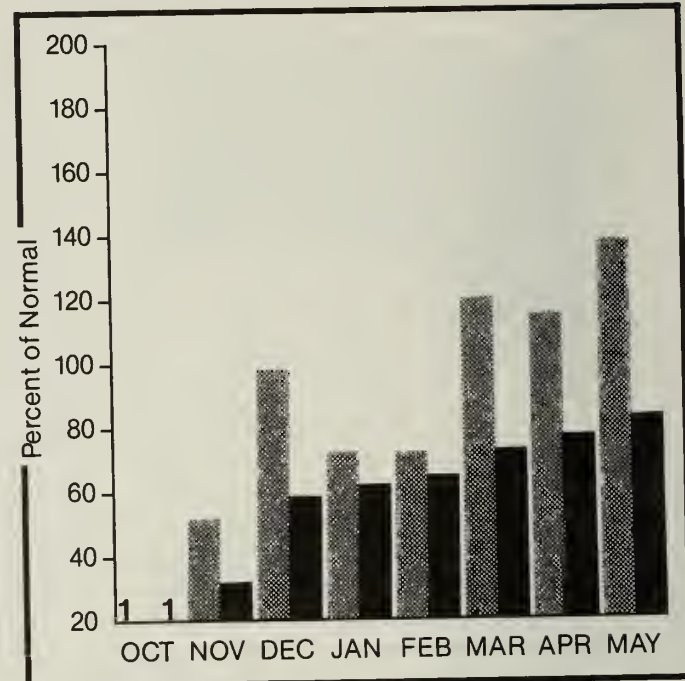
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



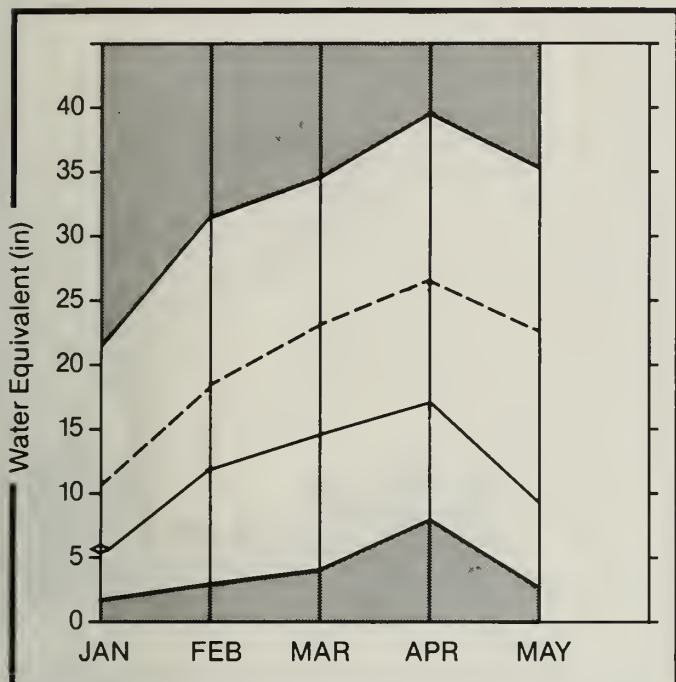
RESERVOIR STORAGE

(1000AF)

RESERVOIR	USEABLE I	** USEABLE STORAGE **		
	CAPACITY I	THIS	LAST	AVG.
	I	YEAR	YEAR	
DWORSHAK	3467.8	2763.6	3389.0	2987.3

Weiser, Payette, and Boise River Basin

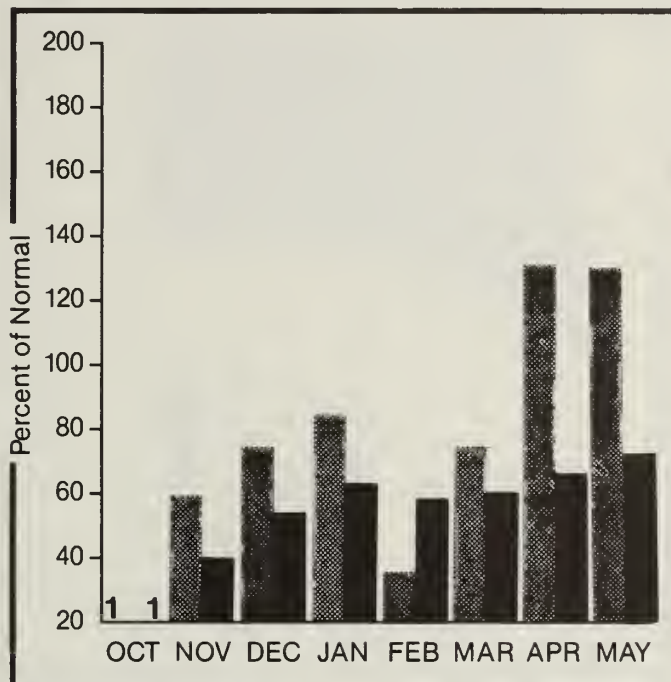
Mountain snowpack* (inches)



*Based on selected stations

Maximum Average
Minimum Current

Precipitation* (percent of normal)



*Based on selected stations

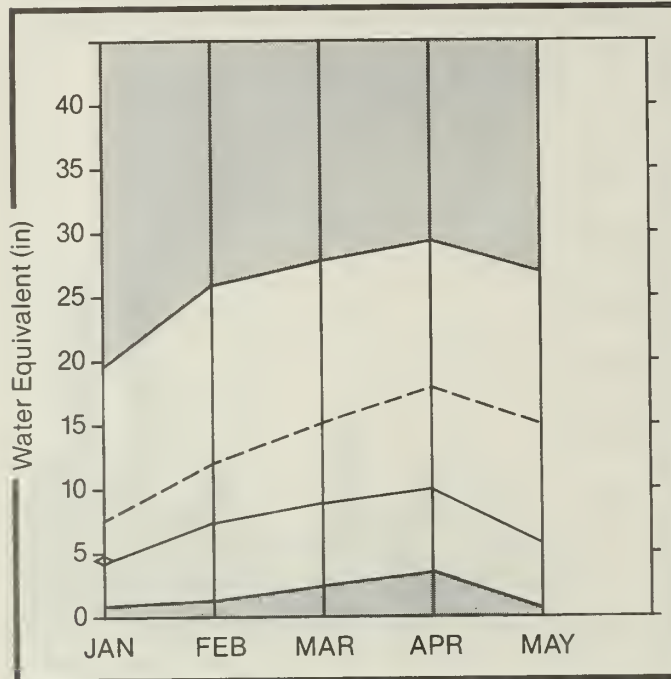
Monthly precipitation Year to date precipitation

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **		
		THIS YEAR	LAST YEAR	AVG.
MANN CREEK	11.3	7.3	9.6	10.8
CASCADE	703.2	541.8	629.5	548.7
DEADWOOD	162.0	122.0	142.6	136.2
ANDERSON RANCH	464.2	241.1	395.2	413.3
ARROWROCK	286.6	66.1	120.2	216.3
LUCKY PEAK	307.0	294.4	293.8	225.9
LAKE LOWELL (DEER FLAT)	177.0	110.0	139.5	159.0

Big Wood, Little Wood, Big Lost, and Little Lost River Basin

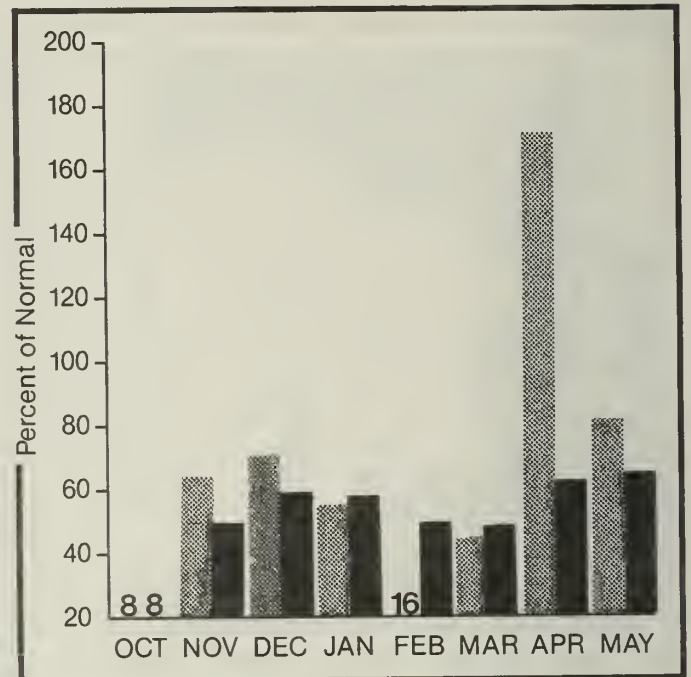
Mountain snowpack* (inches)



*Based on selected stations

Maximum ——— Average - - - -
Minimum ——— Current ———

Precipitation* (percent of normal)



*Based on selected stations

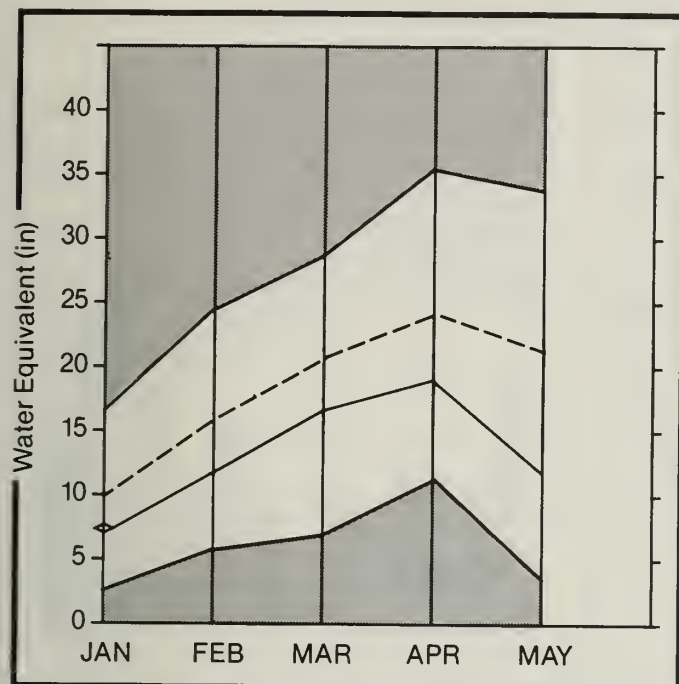
Monthly precipitation [hatched bar] Year to date precipitation [solid black bar]

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **		
		THIS YEAR	LAST YEAR	AVG.
MAGIC	191.5	27.4	121.4	173.8
LITTLE WOOD	30.0	24.7	28.0	28.0
CAREY VALLEY	14.4	4.5	5.8	---
MACKAY	44.5	27.7	45.0	33.6

Willow Creek, Blackfoot, Upper Snake, and Portneuf River Basin

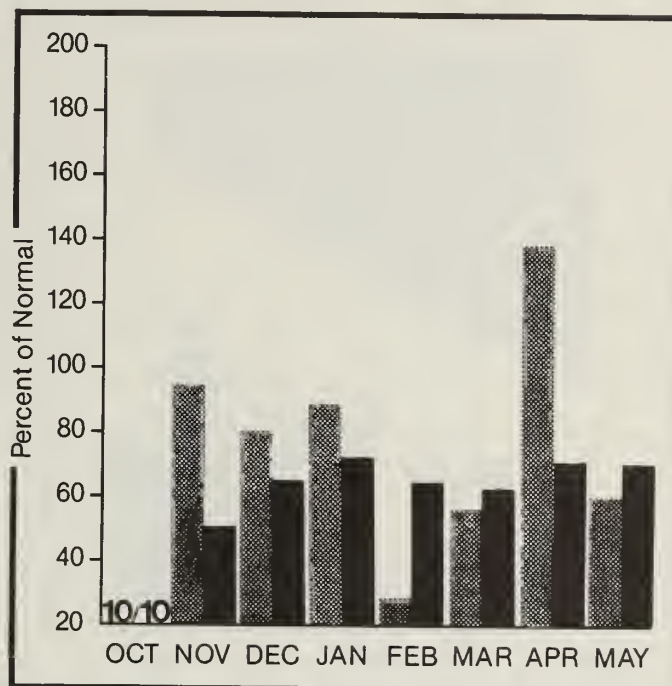
Mountain snowpack* (inches)



*Based on selected stations

Maximum Average
Minimum Current

Precipitation* (percent of normal)



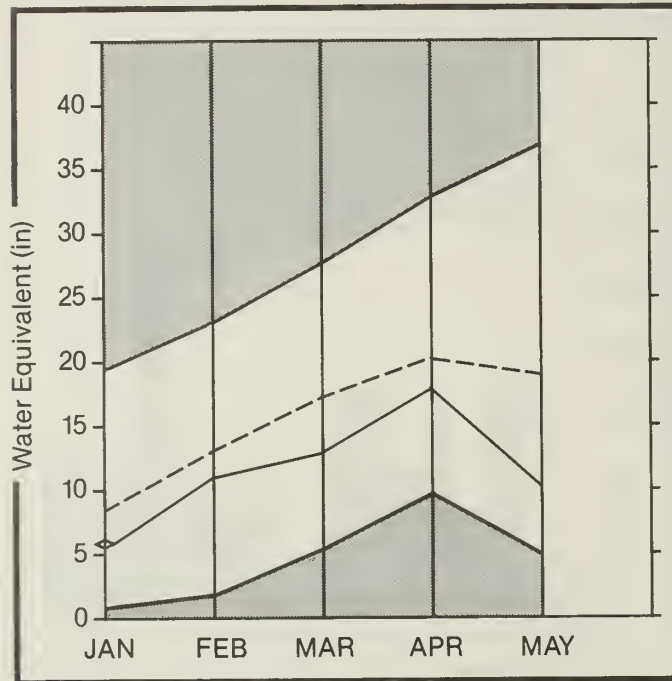
*Based on selected stations

Monthly precipitation Year to date precipitation

RESERVOIR STORAGE (1000AF)	USEABLE I CAPACITY I	** USEABLE STORAGE **		
		THIS YEAR	LAST YEAR	AVG.
ISLAND PARK	127.6	134.0	136.0	134.4
GRASSY LAKE	15.2	13.3	15.2	13.5
JACKSON LAKE	624.4	271.9	284.2	567.9
PALISADES	1357.0	1277.4	1352.2	993.9
AMERICAN FALLS	1700.0	1276.3	1426.4	1519.3
BROWNLEE	975.3	884.3	902.9	756.8
BLACKFOOT	348.7	269.6	311.8	309.5
HENRY'S LAKE	90.4	87.1	90.0	84.6
RIRIE	96.5	68.9	72.1	83.9

Southside Snake River Basin

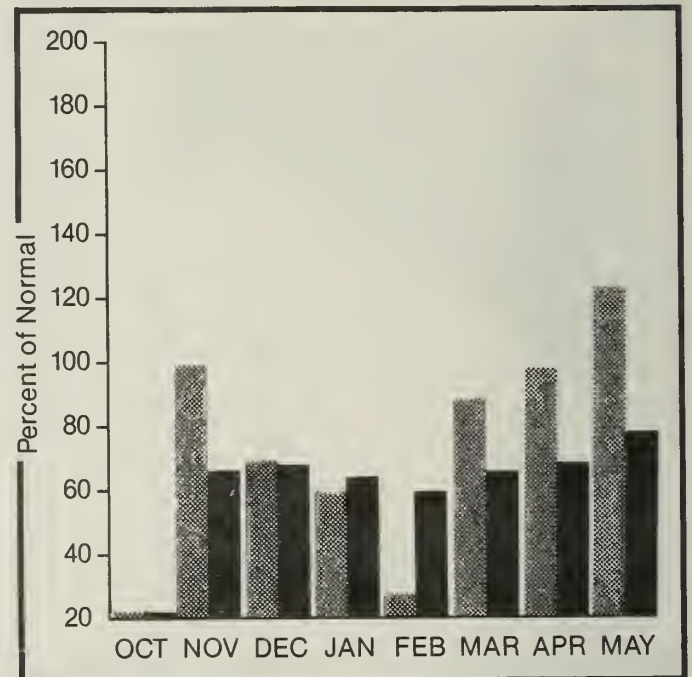
Mountain snowpack* (inches)



*Based on selected stations

Maximum Average
Minimum Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation Year to date precipitation

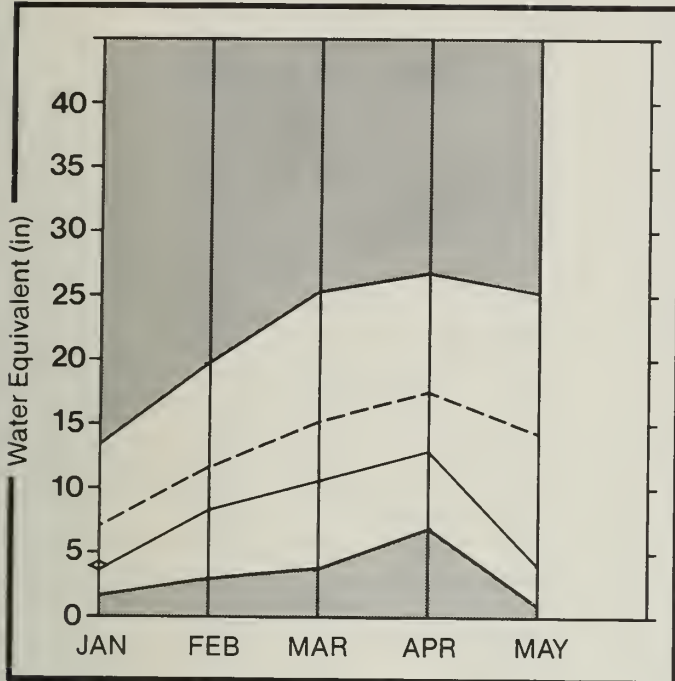
RESERVOIR STORAGE

(1000AF)

RESERVOIR	USEABLE I CAPACITY I	** USEABLE STORAGE **		
		THIS YEAR	LAST YEAR	AVG.
OAKLEY	77.4	18.2	31.1	42.7
SALMON FALLS	182.6	61.8	88.4	94.9
OWYHEE	715.0	225.5	459.0	599.6

Great Basin

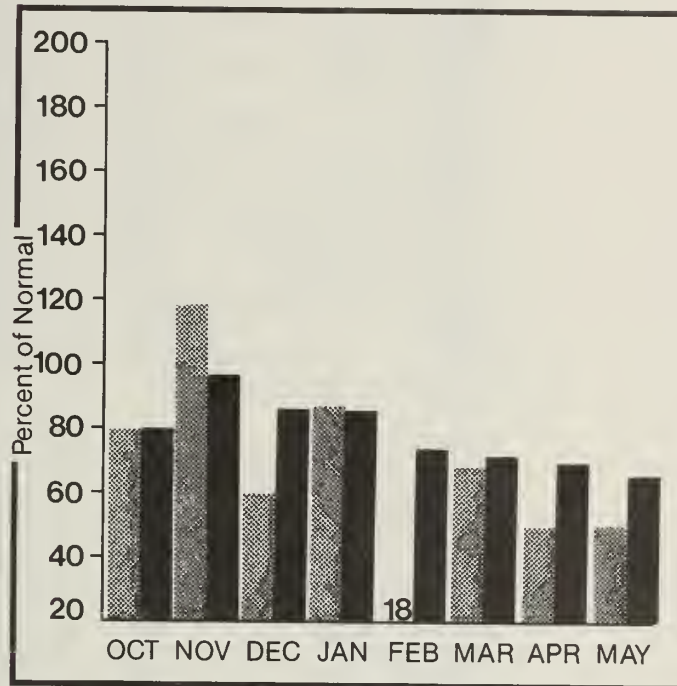
Mountain snowpack* (inches)



*Based on selected stations

Maximum Average
Minimum Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation Year to date precipitation

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **		
		THIS YEAR	LAST YEAR	AVG.
BEAR LAKE	1421.0	1160.2	1128.0	1145.5
MONTPELIER CREEK	4.0	2.9	3.4	3.4

SNOW DATA MEASUREMENTS

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
UPPER COLUMBIA BASIN			WATERSHED I			
BEAR MOUNTAIN	5400	6/01/88	---	18.0E	13.7	38.8
BEAR MTN PILLOW	5400	6/01/88	---	18.0	13.4	39.4
BREEZY SADDLE	5010	5/26/88	0	.0	.0	--
GRANITE PEAK	6000	5/26/88	33	16.5	.0	30.3
HUMBOLDT GLCH PILLOW	4250	6/01/88	---	.0	.0	.0
LOOKOUT	5140	5/30/88	0	.0	.0	12.1
LOOKOUT PILLOW	5140	6/01/88	---	.0	.0	12.4
LOST LAKE	6110	5/26/88	44	23.1	7.4	44.7
MOSQUITO RIDGE	5200	6/01/88	---	.0E	.0	1.3
MOSQUITO PILLOW	5200	6/01/88	---	.0	.0	16.2
SCHWEITZER BASIN	6090	6/02/88	30	16.1	10.9	25.1
SCHWEITZER SN PILLOW	6090	6/01/88	---	17.6	8.6	26.1
SCHWEITZER SNWL	4800	6/02/88	0	.0	.0	2.4
SCHWEITZER RIDGE	6200	6/02/88	14	7.5	9.2	30.0
SHERWIN PILLOW	3200	6/01/88	---	.0	.0	.0
SUNSET	5540	6/01/88	---	10.5E	.0	18.1
SUNSET PILLOW	5540	6/01/88	---	10.3	.0	19.7
CLEARWATER AND SALMON BASINS			WATERSHED II			
BANNER SUMMIT	7040	5/31/88	5	.6	.0	11.6
BANNER SUMMIT PILLOW	7040	6/01/88	---	.5	.0	11.2
BEAR BASIN PILLOW	5350	6/02/88	---	.0	.0	.0
BIG CREEK SUMMIT	6580	5/26/88	7	3.5	.0	19.7
BIG CREEK SUM PILLOW	6580	6/01/88	---	1.6	.0	18.7
BREEZY SADDLE	5010	5/26/88	0	.0	.0	--
COOL CREEK	6250	5/26/88	56	26.8	10.0	32.2
COOLWATER MOUNTAIN	6030	5/26/88	23	11.7	.0	17.6
CRATER MEADOWS	5960	5/26/88	21	15.5	.0	31.0
CRATER MDWS PILLOW	5960	6/01/88	---	6.5	.0	34.0
DEADWOOD SUMMIT	6860	5/31/88	13	4.8	.0	24.8
DEADWOOD SUM PILLOW	6860	6/01/88	---	7.1	.0	26.8
ELK BUTTE	5550	5/26/88	0	.0	.0	9.8
ELK BUTTE PILLOW	5550	6/01/88	---	.8	.0	22.1
GALENA SUMMIT	8780	6/02/88	6	1.5	.0	13.5
GALENA SUMMIT PILLOW	8780	6/06/88	---	.9	.0	11.6
GI880NS PASS	7100	5/31/88	12	1.2	.0	9.8
GOAT LAKE	6500	5/26/88	54	28.2	.0	36.5
GRANITE PEAK	6000	5/26/88	33	16.5	.0	30.3
HEMLOCK BUTTE	5810	5/26/88	10	4.8	.0	29.6
HEMLOCK BUTTE PILLOW	5810	6/01/88	---	7.6	.0	31.8
HOODOO BASIN	6050	5/27/88	41	22.6	4.5	35.0
HOODOO CREEK	5900	5/27/88	40	20.8	2.8	34.7
LOLO PASS	5240	6/01/88	---	.4E	.0	.0
LOLO PASS PILLOW	5240	6/01/88	---	.6	.0	.0
LOST LAKE	6110	5/26/88	44	23.1	7.4	44.7
MEADOW LAKE PILLOW	9150	6/01/88	---	.3	.0	13.3
MILL CREEK SUMMIT	8800	6/01/88	---	6.1E	.0	13.5
MILL CREEK ST PILLOW	8800	6/01/88	---	5.9	.0	12.7
MOONSHINE	7440	6/01/88	---	.0E	.0	.0
MOONSHINE PILLOW	7440	6/01/88	---	.0	.0	.0
MOOSE CREEK	6200	6/01/88	---	.0E	.0	.0
MOOSE CR PILLOW	6200	6/01/88	---	.0E	.0	.0
MORGAN CREEK	7600	6/01/88	---	1.3E	.0	.0
MORGAN CREEK PILLOW	7600	6/01/88	---	1.3	.0	.0
MOUNTAIN MEADOWS	6360	6/01/88	---	1.1E	.0	9.5
MOUNTAIN MDWS PILLOW	6360	6/01/88	---	7.9	.0	14.4
NEZ PERCE PASS	6570	5/30/88	3	.4	--	--
SAVAGE PASS	6170	6/01/88	---	3.6E	.0	17.4
SAVAGE PASS PILLOW	6170	6/01/88	---	3.9	.4	18.0
SECESH SUMMIT	6520	5/27/88	0	.0	.0	13.3
SECESH SUMMIT PILLOW	6520	6/01/88	---	.0	.0	16.0
SHANGHAI SUMMIT	4570	5/26/88	0	.0	.0	.0
SHANGHAI SUM PILLOW	4570	6/01/88	---	.0	.0	.0
SHERWIN PILLOW	3200	6/01/88	---	.0	.0	.0
SQUAW MEADOW	5900	5/27/88	0	.0	.0	10.9
VIENNA MINE	8960	5/31/88	23	6.8	.0	28.7
VIENNA MINE PILLOW	8960	6/01/88	---	10.9	.0	30.1
WEST BRANCH	5560	6/01/88	---	.0E	--	.0
WEST BRANCH PILLOW	5560	6/01/88	---	.0	.0	.0

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
WEISER, PAYETTE AND BOISE BASINS			WATERSHED III			
ATLANTA SUMMIT	7600	5/31/88	18	7.1	.0	20.8
ATLANTA SUM PILLOW	7580	6/01/88	---	2.1	.0	19.7
ATLANTA TOWNSITE	5370	6/01/88	---	.0E	.0	--
BANNER SUMMIT	7040	5/31/88	5	.6	.0	11.6
BANNER SUMMIT PILLOW	7040	6/01/88	---	.5	.0	11.2
BEAR BASIN PILLOW	5350	6/02/88	---	.0	.0	.0
BEAR SADDLE PILLOW	6180	6/01/88	---	.0	.0	.0
BENNETT MOUNTAIN	6560	6/01/88	---	.0E	.0	.0
BIG CREEK SUMMIT	6580	5/26/88	7	3.5	.0	19.7
BIG CREEK SUM PILLOW	6580	6/01/88	---	1.6	.0	18.7
BOGUS BASIN	6340	6/01/88	---	.0E	.0	3.9
BRUNDAGE RESV PILLOW	4500	6/01/88	---	.1	.0	--
COZY COVE	5380	6/01/88	---	.0E	.0	.3
COZY COVE PILLOW	5380	6/01/88	---	.0	.0	.0
DEADWOOD AIRSTIP	5360	6/01/88	---	.0E	--	--
DEADWOOD SUMMIT	6860	5/31/88	13	4.8	.0	24.8
DEADWOOD SUM PILLOW	6860	6/01/88	---	7.1	.0	26.8
DOLLARHIDE SUMMIT	8420	5/31/88	6	1.5	.0	15.3
JACKSON PEAK	7070	5/31/88	6	1.1	.0	11.5
JACKSON PEAK PILLOW	7070	6/01/88	---	1.2	.0	12.0
LAKE FORK	5290	5/26/88	0	.0	.0	.3
MOORES CREEK SUMMIT	6100	6/01/88	---	.0E	.0	11.7
MOORES CK SUM PILLOW	6100	6/01/88	---	.0	.0	12.3
PRAIRIE PILLOW	4800	6/01/88	---	.0	.0	.0
SECESH SUMMIT	6520	5/27/88	0	.0	.0	13.3
SECESH SUMMIT PILLOW	6520	6/01/88	---	.0	.0	16.0
SOLDIER R.S.	5740	6/01/88	---	.0E	.0	.0
SOLDIER R.S. PILLOW	4330	6/01/88	---	.0	.0	--
SQUAW FLAT	6240	6/01/88	---	.0E	.0	.0
SQUAW FLAT PILLOW	6240	6/01/88	---	.0	.0	.0
SQUAW MEADOW	5900	5/27/88	0	.0	.0	10.9
TRINITY MOUNTAIN	7770	5/31/88	13	5.4	.0	26.6
TRINITY MTN. PILLOW	7770	6/01/88	---	9.6	.0	29.7
VIENNA MINE	8960	5/31/88	23	6.8	.0	28.7
VIENNA MINE PILLOW	8960	6/01/88	---	10.9	.0	30.1
WEST BRANCH	5560	6/01/88	---	.0E	--	.0
WEST BRANCH PILLOW	5560	6/01/88	---	.0	.0	.0
BIG WOOD, LITTLE WOOD, BIG LOST AND LITTLE LOST BASINS			WATERSHED IV			
BEAR CANYON PILLOW	7900	6/01/88	---	.0	.0	.0
BENNETT MOUNTAIN	6560	6/01/88	---	.0E	.0	.0
DOLLARHIDE SUMMIT	8420	5/31/88	6	1.5	.0	15.3
GALENA	7440	6/01/88	---	.0E	--	1.3
GALENA PILLOW	7440	6/01/88	---	.1	.0	7.5
GALENA NEW	7470	6/02/88	0	.0	.0	7.5
GALENA SUMMIT	8780	6/02/88	6	1.5	.0	13.5
GALENA SUMMIT PILLOW	8780	6/06/88	---	.9	.0	11.6
GARFIELD R.S.	6560	6/01/88	---	.0E	.0	.0
GARFIELD R.S. PILLOW	6560	6/01/88	---	.0	.0	.0
HILTS CREEK	8000	6/01/88	---	.0E	.0	.0
HILTS CREEK PILLOW	8000	6/01/88	---	.0	.0	.0
HYNDMAN CREEK	7440	6/01/88	---	.0E	.0	.0
HYNDMAN PILLOW	7440	6/01/88	---	.0	.0	.0
LOST-WOOD DVD PILLOW	7900	6/01/88	---	.0	.0	7.7
MOONSHINE	7440	6/01/88	---	.0E	.0	.0
MOONSHINE PILLOW	7440	6/01/88	---	.0	.0	.0
MULDOON	6320	6/01/88	---	.0E	--	--
SOLDIER R.S.	5740	6/01/88	---	.0E	.0	.0
SOLDIER R.S. PILLOW	4330	6/01/88	---	.0	.0	--
STICKNEY MILL	7430	6/01/88	---	.0E	.0	.0
STICKNEY MILL PILLOW	7430	6/01/88	---	.0	.0	.0
SWEDE PEAK	7640	6/01/88	---	.0E	.0	1.3
SWEDE PEAK PILLOW	7640	6/01/88	---	.1	.0	.0
VIENNA MINE	8960	5/31/88	23	6.8	.0	28.7
VIENNA MINE PILLOW	8960	6/01/88	---	10.9	.0	30.1

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
<hr/>						
WILLOW, BLACKFOOT, UPPER SNAKE AND PORTNEUF BASINS				WATERSHED V		
BIRCH CREEK	6800	6/01/88	---	.0E	.0	--
BLUE LEDGE MINE	6900	6/01/88	---	.0E	.0	--
BLUE RIDGE	6780	6/01/88	---	.0E	.0	--
BONE	6200	6/01/88	0	.0	--	--
BROCKMAN STATION	6430	6/01/88	---	.0E	.0	--
COULTER CREEK	7020	6/01/88	---	.0E	.0	.0
COULTER CREEK PILLOW	7020	6/01/88	---	.0	.0	.0
CRAB CREEK	6860	6/01/88	---	.0E	.0	.0
CRAB CREEK PILLOW	6860	6/01/88	---	.0	.0	.0
FALL CREEK	6820	6/01/88	---	.0E	.0	--
GRASSY LAKE	7270	5/31/88	0	.0	.0	15.4
GRASSY LAKE PILLOW	7270	6/01/88	---	.0	.0	16.1
ISLAND PARK	6290	6/01/88	---	.0E	.0	.0
ISLAND PARK PILLOW	6290	6/01/88	---	.0	.0	.0
MC RENOLDS RESERVOIR	6720	6/01/88	---	.0E	--	--
MUD CREEK	7100	6/01/88	---	.0E	.0	--
PHILLIPS BENCH	8200	6/01/88	---	11.1E	.0	19.9
PINE CREEK PASS	6810	6/01/88	---	.0E	.0	1.7
SHEEP MOUNTAIN	6570	6/01/88	---	.0E	.0	.0
SHEEP MTN PILLOW	6570	6/01/88	---	.0	.0	.0
SLUG CREEK DIVIDE	7230	6/01/88	---	.0E	.0	.0
SLUG CK DVD PILLOW	7230	6/01/88	---	.0	.0	.0
SOMSEN RANCH	6840	6/01/88	---	.0E	.0	.0
SOMSEN RANCH PILLOW	6800	6/01/88	---	.0	.0	.0
STATE LINE	6660	6/01/88	---	.0E	.0	--
WHITE ELEPHANT PILL	7710	6/01/88	---	.0	.0	17.0
WILDHORSE DIVIDE	6490	6/01/88	---	.0E	--	.0
WILDHORSE DVD PILLOW	6490	6/01/88	---	.0	.0	.0
SOUTHSIDE SNAKE BASIN				WATERSHED VI		
BEAR CREEK	7800	6/01/88	---	2.7E	.0	5.3
BEAR CK SNOTEL	7800	6/01/88	---	2.6	.0	13.2
BOSTETTER R.S.	7500	6/01/88	---	.0E	.0	.0
BOSTETTER RS PILLOW	7500	6/01/88	---	.0	.0	.0
GOAT CREEK	8800	6/01/88	---	2.3E	.0	12.7
HOWELL CANYON	7980	6/01/88	---	.0E	.0	.0
HOWELL CANYON PILLOW	7980	6/01/88	---	.0	.0	.0
MAGIC MOUNTAIN	6880	6/01/88	---	1.7E	.0	.0
MAGIC MTN PILLOW	6880	6/01/88	---	1.8	.0	.0
MUD FLAT	5730	6/01/88	---	.0E	.0	.0
MUD FLAT PILLOW	5730	6/01/88	---	.0	.0	.0
POLE CREEK R.S.	8330	6/01/88	---	2.7E	.0	13.2
SOUTH MTN PILLOW	6500	6/01/88	---	.0	.0	.0
GREAT BASIN				WATERSHED VII		
EMIGRANT SUMMIT	7390	6/01/88	---	.0E	.0	8.9
EMIGRANT SUM PILLOW	7390	6/01/88	---	.0	.0	15.0
GIVEOUT	6860	6/01/88	---	.0E	--	.0
GIVEOUT PILLOW	6840	6/01/88	---	.0	.0	.0
OXFORD SPRING PILLOW	6740	6/01/88	---	.0	.0	.0

The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State

Idaho Department of Water Resources
Soil and Water Conservation Districts of Idaho

Federal

U.S. Department of Agriculture
Forest Service
U.S. Department of Army
Corps of Engineers
U.S. Department of Commerce
NOAA, National Weather Service
U.S. Department of Interior
Bureau of Reclamation
Geological Survey, Water Resources Division
Shoshone-Bannock Tribal Council

Local

Big Lost River Irrigation District
Big Wood Irrigation Company
Boise Project Board of Control
Idaho Water District #01
Lewiston Orchards Irrigation District
Little Wood River Irrigation District
North Board of Control — Owyhee Project
Salmon Falls Irrigation Company
South Board of Control — Owyhee Project

Private

Cyprus Mining Company
FMC Corporation
Idaho Power Company
Le Bois Resort
Washington Water Power Company

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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**Idaho
Water Supply Outlook**

and

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SOIL CONSERVATION SERVICE



United States
Department of
Agriculture

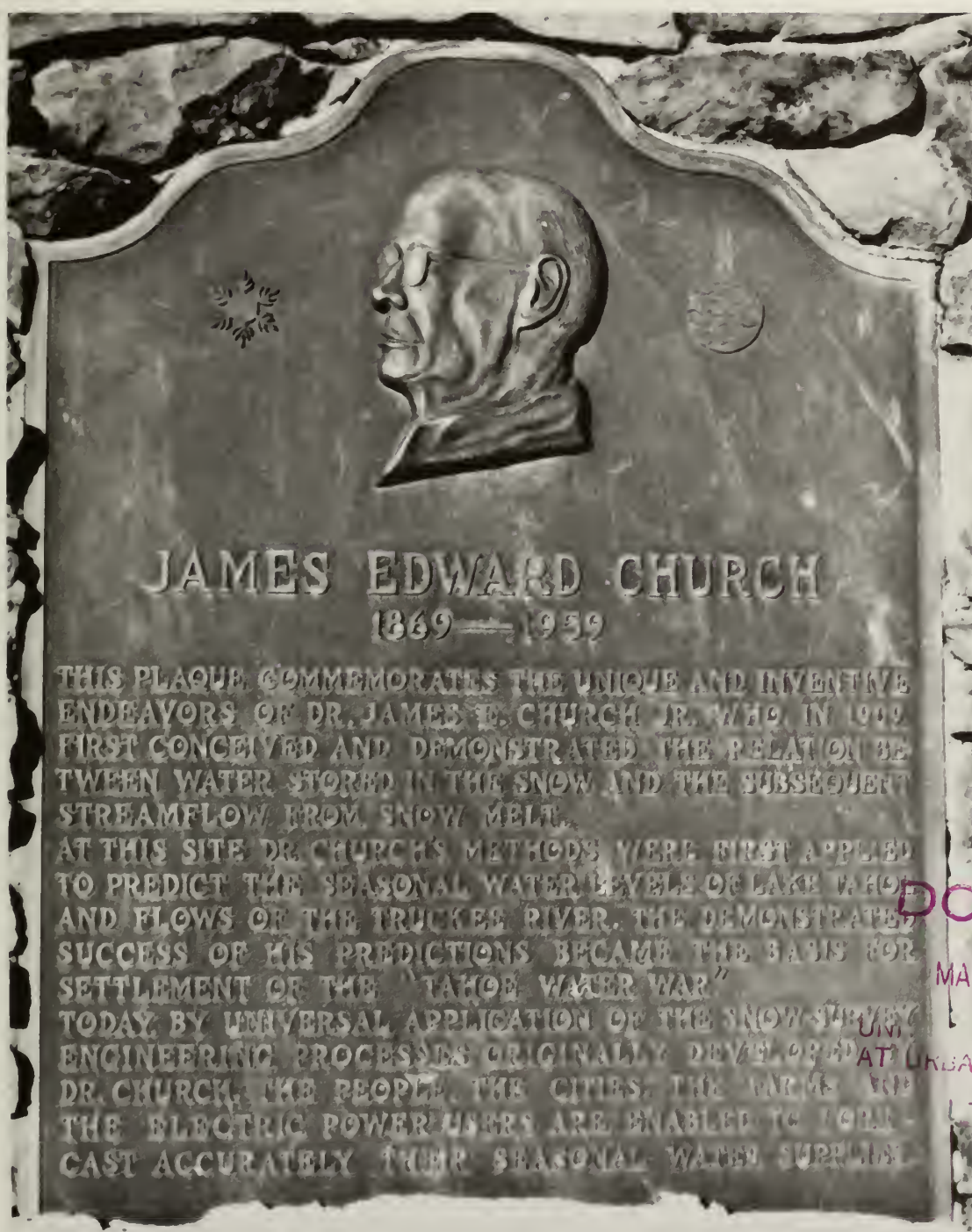
Soil
Conservation
Service

Boise,
Idaho



Idaho Water Supply Outlook

January 1, 1989



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ILLINOIS
URBANA-CHAMPAIGN

Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Soil Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

An error is associated with each forecast, and this error decreases as the season progresses and more data becomes available. To express the range of error that can be expected, "most probable" forecasts are issued along with a range representing a "reasonable minimum" and a "reasonable maximum". Actual streamflow can be expected to fall within this range in eight out of ten years. Additionally two specific scenarios are provided based on the assumption that subsequent precipitation will be "wet", above average, or "dry", below average.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola Ave., Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Building A, 3rd floor, Denver, CO 80211
Idaho	3244 Elder Street, Room 124, Boise, ID 83705
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 87102-3157
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97204
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	W. 920 Riverside, Room 360, Spokane, WA 99201-1080
Wyoming	Federal Building, 100 "B" Street, Room 3124, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209-3489.

Water supply reports published by other agencies:

California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Idaho Water Supply Outlook

and

Federal — State — Private Cooperative Snow Surveys

Issued by

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Director
State of Idaho
Department of Water Resources
Boise, Idaho

"Programs and assistance of the United States Department of Agriculture are available without regard to race, creed, color, sex, age, or national origin."

THE HISTORY OF THE
CITY OF BOSTON

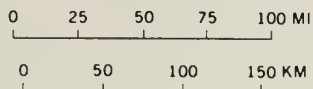
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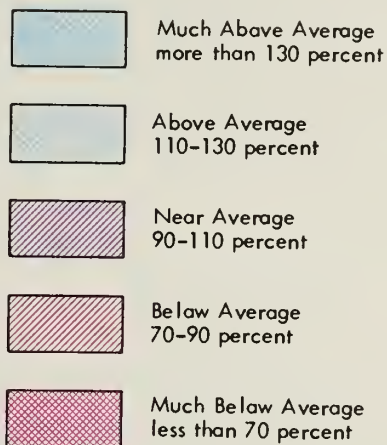
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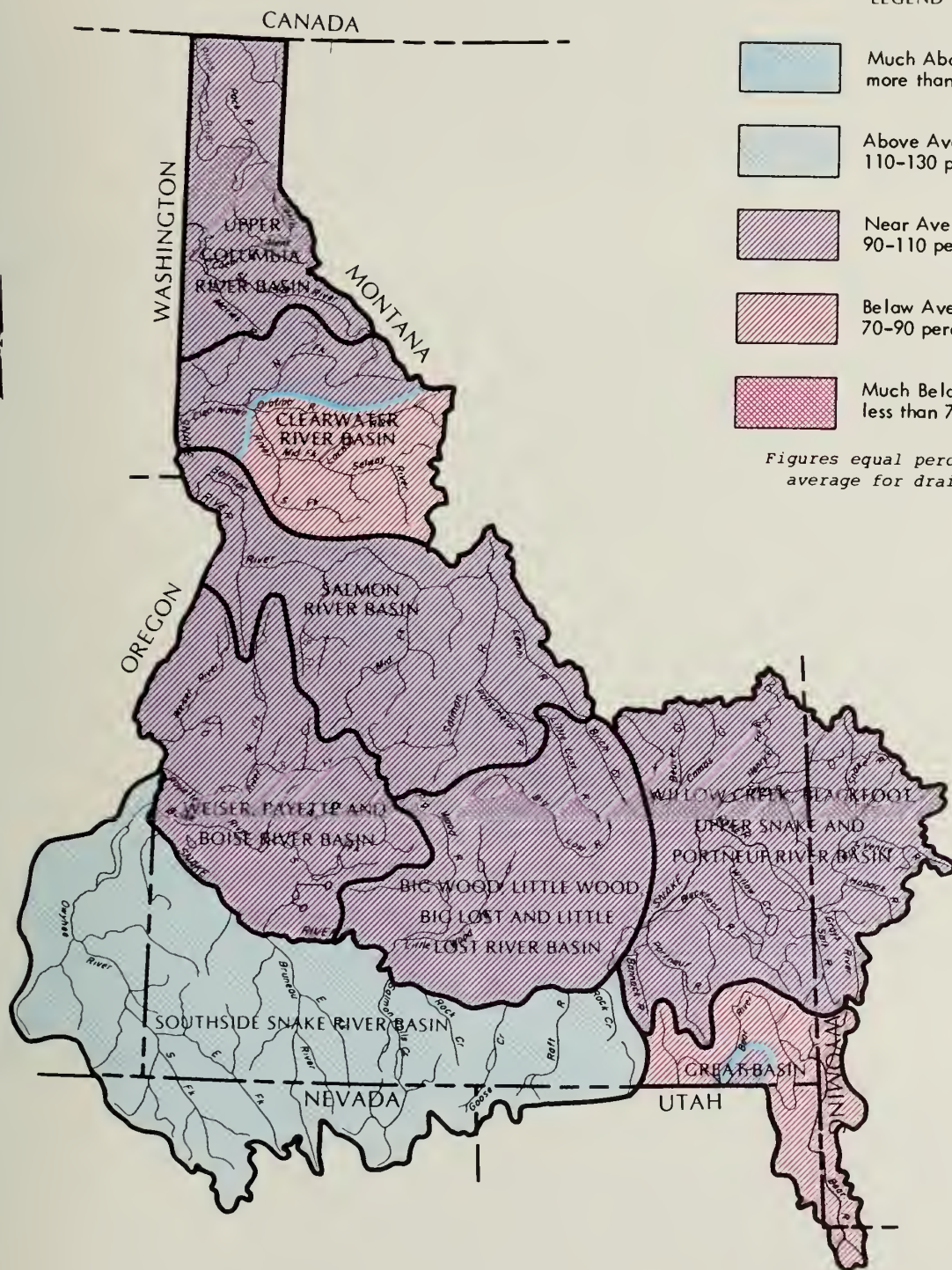
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STREAMFLOW PROSPECTS
IDAHO

LEGEND



Figures equal percent of
average for drainage.



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GENERAL OUTLOOK

SUMMARY:

GREAT NEWS FOR 1989... IDAHO'S MOUNTAIN SNOWPACK IS NEAR NORMAL FOR THE FIRST TIME IN THREE YEARS, ESPECIALLY IN THE DROUGHT RAVAGED CENTRAL AND SOUTHERN PORTIONS OF THE STATE. CONSEQUENTLY, MOST STREAMFLOW FORECASTS ARE FOR NEAR NORMAL RUNOFF CONDITIONS. IT IS TOO EARLY TO COMPLETELY CALL THE DROUGHT OFF, BUT WITH NEARLY HALF OF THE SNOW ACCUMULATION SEASON BEHIND US, WATER USERS CAN BE CAUTIOUSLY OPTIMISTIC ABOUT 1989 WATER SUPPLY CONDITIONS.

SNOWPACK:

The first snow surveys of the 1989 season show Idaho's winter snow accumulation to be off to the best start in over three years. North Idaho snowpacks, however, remain below normal for the fourth consecutive year, ranging from 70% of average on the Kootenai basin to 91% on the Clearwater River. In the central part of the state, from the Weiser drainage eastward to the Little Lost River, snowpacks are near normal ranging from 90 to 109% of average on the major river basins. In eastern Idaho and western Wyoming, snowpacks vary widely, ranging from 74% of normal on the Salt River drainage to 153% on the Beaver-Camas Creek basin near Dubois with most basins between 85 and 135% of average. In the Great Basin area of southeastern Idaho, snowpacks are near to slightly below normal, ranging from 80 to 100% of average. Basins on the south side of the Snake report the highest snowpack conditions in the state, ranging from 136% of normal in the Salmon Falls Creek basin to 169% in the Owyhee basin. By January 1, only about 40% of the winter's accumulation season is behind us. To ensure near normal snowpack conditions at the peak of the snow accumulation season (early to mid-April), most basins will require normal or above normal snowfall for the remainder of the winter.

PRECIPITATION:

The 1989 water year began on a very dry note as October brought very little precipitation. Many stations in southern and central Idaho reported no measurable rainfall during the month. The northern half of the state received a little more rainfall but monthly reports were well below normal; only four locations reported more than half of October's normal. The entire state averaged only 34% of normal

for the month of October. November saw a marked improvement in precipitation across Idaho: the statewide average for the month was 187% of normal, with Boise setting an all time record of 3.36 inches. Southern Idaho received the heaviest precipitation with Aberdeen reporting 344% of normal for the month of November. Grangeville reported 94% for the month while all other stations reported above average precipitation amounts, ranging from 125 to 170 percent. December began as another dry month. During the last half of the month several storms moved across the state but only managed to produce a statewide average of 63% of normal. December precipitation was uniformly distributed across the state except for a band from Fairfield to Pocatello, with Pocatello receiving 124% of average.

RESERVOIRS:

Two consecutive years of below normal snowpack coupled with very dry conditions this past summer left most reservoirs empty or nearly empty at the end of the 1988 irrigation season. Heavy precipitation in November resulted in improved streamflow volumes and allowed most reservoir operators to begin refilling their systems for the 1989 season. Reservoir conditions, however, remain very low throughout the state with only Brownlee Reservoir reporting above average storage at 108% of normal. Twenty-seven key reservoirs across the state currently report a combined storage of 71% of average and only 47% of capacity. Reservoirs with the lowest storage volumes are generally found in the south central and southwestern parts of the state where many reservoirs are about half of average storage and about one-third of capacity.

STREAMFLOW:

As a result of the encouraging January 1 snow surveys, streamflow forecasts are much improved over those of the past two years. The most promising portion of the state is southwestern Idaho, where spring and summer runoff volumes range from 113 to 124% of normal. Streamflow forecasts in central Idaho are near average, ranging from 90% for the Salmon at White Bird to 103% for the South and Middle Forks of the Boise River. On the other end of the scale, north Idaho and the Great Basin are areas of possible concern due to below average streamflow forecasts. All forecasts assume normal precipitation for the remainder of the accumulation season. With over half of the winter yet to come, near or above normal snowfall will be needed to turn these predictions into reality.

OTHER INFORMATION

SOIL MOISTURE:

Soil moisture conditions are below to well below normal throughout Idaho. In the southern half of the state, mountain soils have received very little moisture since last spring and are very dry. Most mountain precipitation stations in southern Idaho reported less than 0.2 inches of rain in October. Normal amounts for these stations are generally 2.0 - 4.0 inches. The heavy precipitation received in November fell mostly in the form of snow in the mountainous areas and added little moisture to the soil profile. Soil moisture conditions in the northern half of the state are somewhat better as a result of the heavy rains received during the last half of October but remain drier than normal in the mountainous areas. A significant portion of snowmelt is expected to be absorbed by the dry soils - particularly in southern Idaho.

HYDROLOGIC EFFECT OF 1988 FIRES:

The SCS has developed preliminary estimates of the increased spring runoff expected to occur as a result of fires during the summer of 1988. Current estimates will be revised as more site information is assembled and procedures are refined.

Based on currently available information, the following increases are projected for the affected forecast points included in this report:

LOCATION	% DRAINAGE burned*	% INCREASED RUNOFF	
		apr-jul	apr-sep
Snake nr Moran	44	11	13

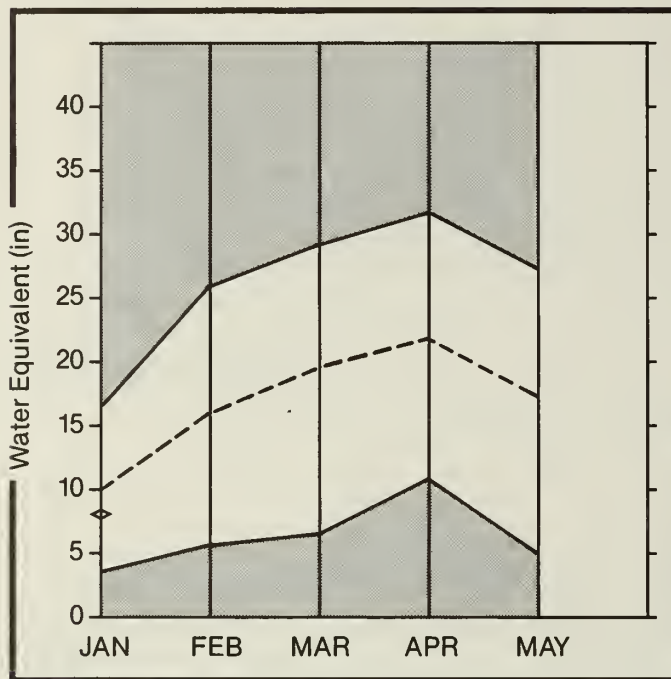
Increases are included in the forecast values and in all appropriate downstream forecasts.

CLEARWATER AND SALMON NOW REPORTED SEPARATELY:

Idaho's 1989 Water Supply Outlook Report contains a change from previous years: the Clearwater and the Salmon River basins are now reported separately. This change should provide more meaningful information to the users of this report due to the differences in hydrology and climatology of these basins.

Upper Columbia Basin

Mountain snowpack* (inches)



*Based on selected stations

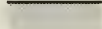
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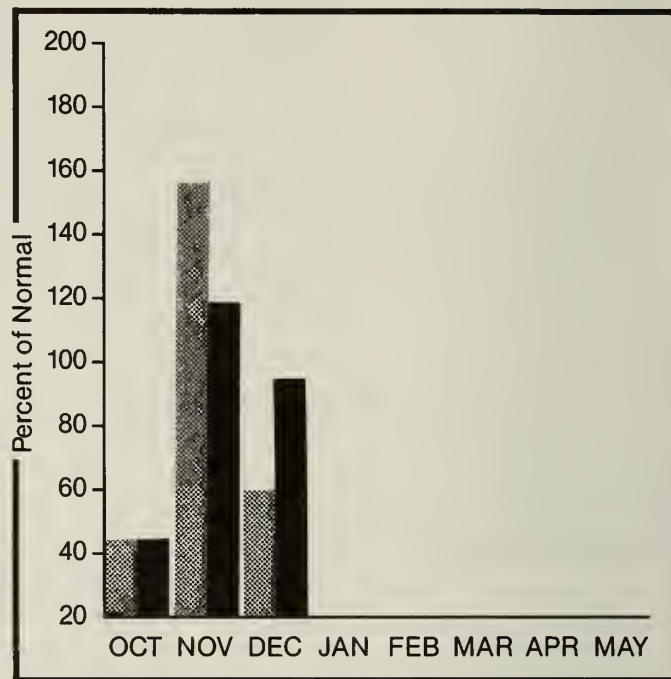
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Snow surveys taken near January 1 show snowpack conditions in the basin are much better than those reported at this time last year. However, the mountain snowpack remains below normal throughout the basin for the fourth consecutive year. Currently, snowpacks range from 70% of average on the Kootenai basin to 84% on the Priest, Spokane, and Pend Oreille basins. Reservoir storage is also below normal, ranging from 57% of average in Coeur d'Alene Lake to 82% in Priest Lake. April - September streamflow volumes are forecast to range from 86 to 98% of average.

For more information contact your local Soil Conservation Service office.

UPPER COLUMBIA RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST	HIST	HIST	WET	DRY	REAS.	REAS.	25 YR.
	PERIOD	PROBABLE (1000AF)	PROBABLE (% AVG.)	SUBS. (1000AF)	SUBS. (1000AF)	MAX. (1000AF)	MIN. (1000AF)	AVG. (1000AF)
KOOTENAI at Leona (2)	APR-SEP	8250	98			11000	5630	8441
	APR-JUL	7170	98			9520	4890	7340
	APR-JUN	5780	98			7670	3890	5899
CLARK FORK at Whitehorse Rapids (2)	APR-SEP	11500	86			16700	6150	13370
	APR-JUL	10400	86			15300	5540	12150
	APR-JUN	8910	86			13100	4660	10360
PEND OREILLE LAKE inflow (2)	APR-SEP	12900	86			18700	7080	14930
	APR-JUL	11800	86			17100	5480	13650
	APR-JUN	10100	86			14800	5620	11780
PRIEST nr Priest River (2)	APR-SEP	830	93			1150	510	893
	APR-JUL	780	93			1080	480	838
COEUR D'ALENE at Enaville	APR-SEP	745	90			1160	330	830
	APR-JUL	710	90			1100	315	789
SPOKANE nr Post Falls (2)	APR-SEP	2530	90	2870	2190	3970	1090	7820
	APR-JUL	2440	90	2770	2110	3830	1050	2723
ST. JOE at Calder	APR-SEP	1170	91	1430	925	1590	760	1281
	APR-JUL	1350	111	1590	1100	1500	720	1211

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVER'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
HUNGRY HORSE	3451.0	1631.0	2039.0	2649.0	Kootenai ab Bonners Ferry	26	129	70
FLATHEAD LAKE	1791.0	887.0	929.0	1340.0	Pend Oreille River	122	152	84
PEND OREILLE	1561.2	560.4	544.7	744.9	Clark Fork River	85	138	78
NOXON RAPIDS	335.0	318.4	320.5	318.1	Priest River	5	118	84
COEUR D'ALENE	291.2	118.2	110.0	207.7	Rathdrum Creek	0	0	0
PRIEST LAKE	97.7	28.8	32.8	35.2	Hayden Lake	0	0	0
					Coeur d'Alene River	3	153	74
					St. Joe River	3	174	90
					Spokane River	16	166	84
					Palouse River	0	0	0

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.

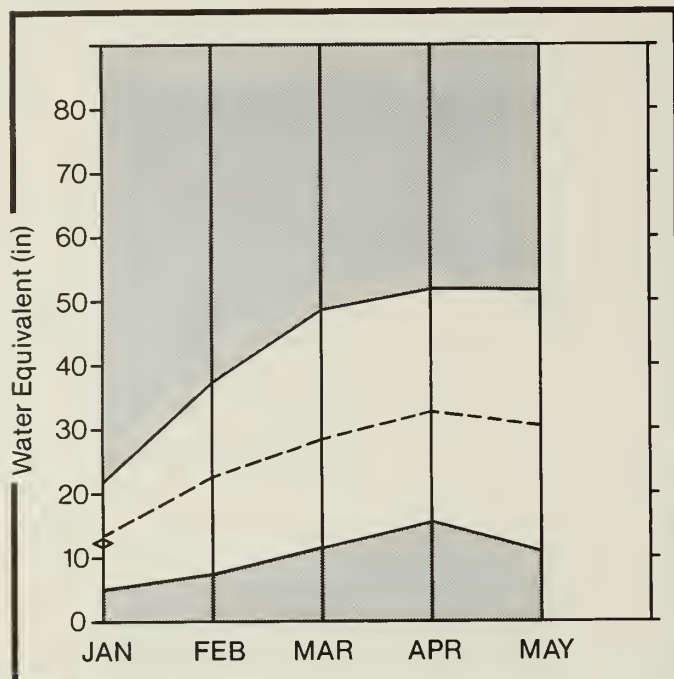
REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.

(1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.

(2) - Corrected for upstream diversions or changes in reservoir storage.

Clearwater River Basin

Mountain snowpack* (inches)



*Based on selected stations

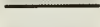
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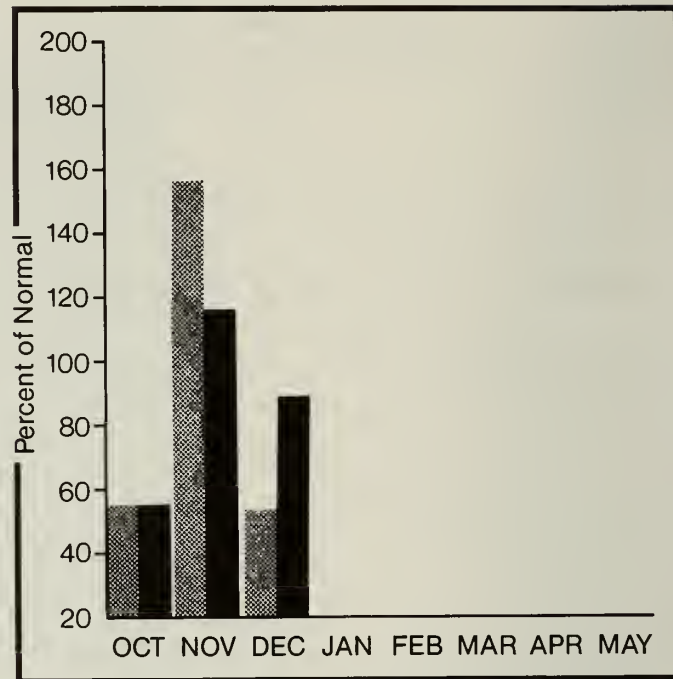
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

The January 1 snow surveys show snowpack conditions on the Clearwater basin to be much better than those reported at this time last year, but remain below average over the entire basin. Snowpack figures currently range from 84% of average on the Selway to 91% on the Lochsa drainage. Carryover storage in Dworshak Reservoir is slightly below normal for January 1 at 92% of average and 64% of capacity. April - September streamflows are forecast to be slightly below normal ranging from 89 to 98% of average.

For more information contact your local Soil Conservation Service office.

CLEARWATER RIVER BASIN

STREAMFLOW FORECASTS

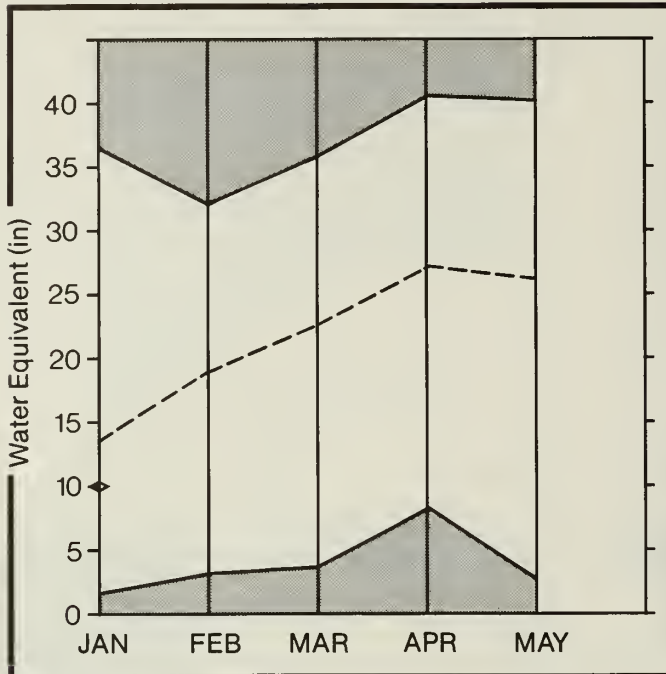
FORECAST POINT	FORECAST PERIOD	HIST. PROBABLE (1000AF)	HIST. PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
DWORSHAK RESERVOIR inflow	APR-SEP	2950	98			4270	1630	3010
	APR-JUL	2770	98			4010	1530	2822
CLEARWATER at Orofino	APR-SEP	4590	89			6910	7270	5163
	APR-JUL	4350	89			6550	2150	4889
CLEARWATER at Spalding	APR-SEP	7940	95			11900	4000	8378
	APR-JUL	7510	95			11200	3790	7916

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
DWORSHAK	3467.8	2234.6	2011.5	2431.0	North Fork Clearwater	12	193 90
					Lochsa River	4	143 91
					Selway River	4	148 84
					Clearwater River	18	174 91

WET SUBS. and DRY SUBS. represent 120 and 70 percent subsequent precipitation events respectively.
 REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.
 (1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.
 (Z) - Corrected for upstream diversions or changes in reservoir storage.

Salmon River Basin

Mountain snowpack* (inches)



*Based on selected stations

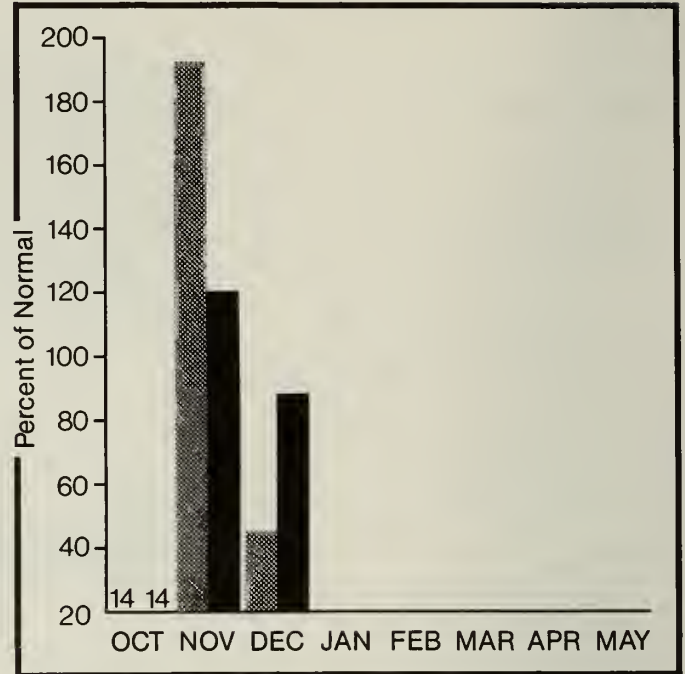
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

Snowpack conditions on the Salmon basin are slightly below normal for January 1 but are well above those reported on this date last year. Currently, snowpacks range from 78% of average on the Lemhi drainage to 85% on the Salmon basin. April - September streamflow volumes are forecast to range from 90 to 92% of normal. Soil profiles, particularly in the higher elevations, are very dry and are expected to absorb more than normal amounts of water when the spring melt begins. Near or above normal precipitation patterns over the remainder of the season should provide good flows for white water boating and other uses this spring and summer.

For more information contact your local Soil Conservation Service office.

SALMON RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	FEAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
SALMON at Salmon	APR-SEP	990	92			1510	485	1077
	APR-JUL	845	92			1290	415	919
SALMON at White Bird	APR-SEP	6300	90			8890	3780	7007
	APR-JUL	5690	90			3030	3350	6322

RESERVOIR STORAGE (1000AF)				WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **		WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF
		THIS YEAR	LAST YEAR			LAST YR. AVERAGE
				Salmon River ab Salmon	7	132 83
				Lemhi River	2	112 78
				Salmon River Total	02	154 85

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.

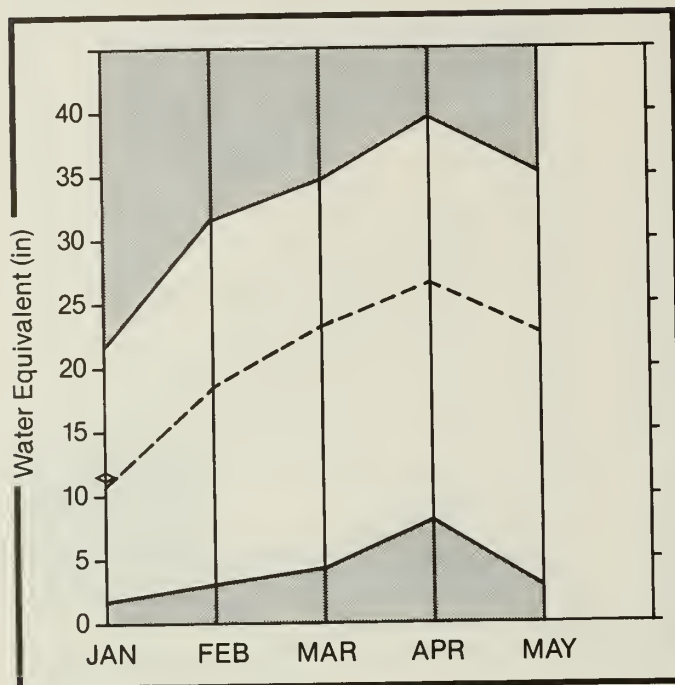
REAS. MAX. and FEAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.

(1) - REAS. MAX. and FEAS. MIN. forecasts are for 5% and 95% exceedance levels.

(2) - Corrected for upstream diversions or changes in reservoir storage.

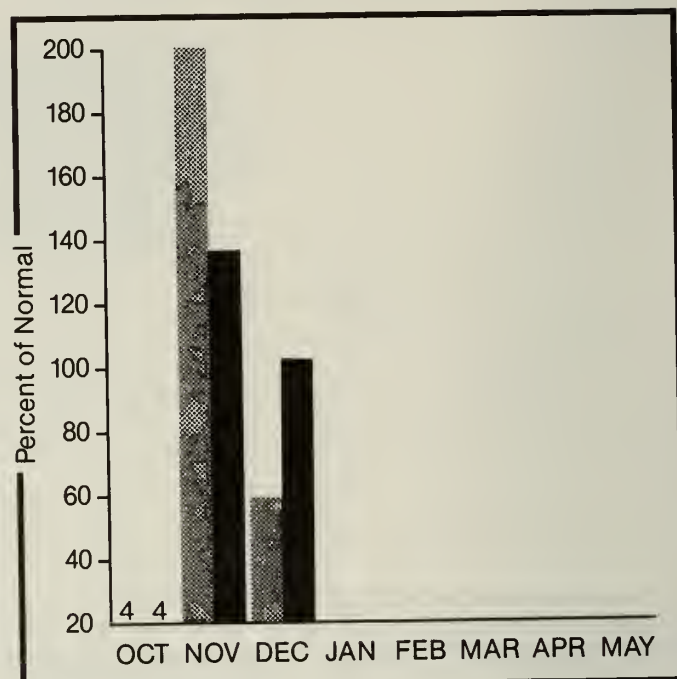
Weiser, Payette, and Boise River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum



Average



Minimum



Current



Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Snow measurements taken near January 1 indicate normal snowpack conditions throughout this basin for the first time since 1986, generally ranging from 90 to 109% of average. Higher elevation stations report slightly below normal snowpacks while lower elevations report slightly above to well above normal snow accumulation. The drought conditions that persisted through late summer and early fall have left soil profiles very dry. Most of the heavy precipitation received in November fell in the form of snow in the mountain areas and added little or no moisture to the soils. Near or above normal snow accumulation will be needed for the remainder of the season to provide normal spring and summer streamflows. Currently, April - September streamflow volumes are forecast to be 95 to 103% of average. Reservoir storage remains well below normal in the Boise basin with a combined storage of 50% of average and 30% of capacity.

WEISER, PAYETTE, AND BOISE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
WEISER nr Weiser	APR-SEP	435	98			695	173	444
	APR-JUL	405	98			650	161	414
NF PAYETTE at Cascade (2)	APR-SEP	555	98	635	480	695	415	568
	APR-JUL	520	98	595	445	655	385	531
NF PAYETTE nr Banks (2)	APR-SEP	720	98	875	565	940	500	737
	APR-JUL	675	98	835	515	880	470	691
PAYETTE nr Horseshoe Bend	APR-SEP	1830	98	2170	1510	2390	1270	1862
	APR-JUL	1690	98	2020	1380	2210	1170	1717
SF PAYETTE at Lowman	APR-SEP	490	95	575	405	645	335	516
	APR-JUL	435	95	515	355	570	300	458
DEADWOOD RESERVOIR inflow	APR-JUL	140	98			191	90	143
BOISE nr Twin Springs (1)	APR-SEP	745	103	890	585	955	545	722
	APR-JUL	685	103	825	530	870	505	664
BOISE nr Boise (1)	APR-SEP	1630	100	2040	1220	2300	980	1628
	APR-JUL	1510	100	1920	1100	2130	905	1508
	APR-JUN	1330	100	1680	995	1880	810	1334
SF BOISE at Anderson Ranch Dam (1)	APR-SEP	635	103	790	480	820	450	619
	APR-JUL	595	103	740	450	770	415	578

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
MANN CREEK	11.3	1.6	1.1	4.2	Mann Creek	1	286	129
CASCADE	703.2	394.4	356.5	419.7	Weiser River	4	215	106
DEADWOOD	162.0	54.7	60.0	73.7	North Fork Payette	10	195	92
ANDERSON RANCH	464.2	133.9	129.0	319.9	South Fork Payette	7	177	91
ARROWROCK	286.6	104.2	97.2	193.8	Payette River Total	16	183	90
LUCKY PEAK	307.0	52.4	72.9	94.5	Middle & North Fork Boise	9	172	95
LAKE LOWELL (DEER FLAT)	177.0	78.7	86.3	126.0	South Fork Boise River	9	190	108
					Boise River Total	18	215	109
					Canyon Creek	1	1180	184

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.

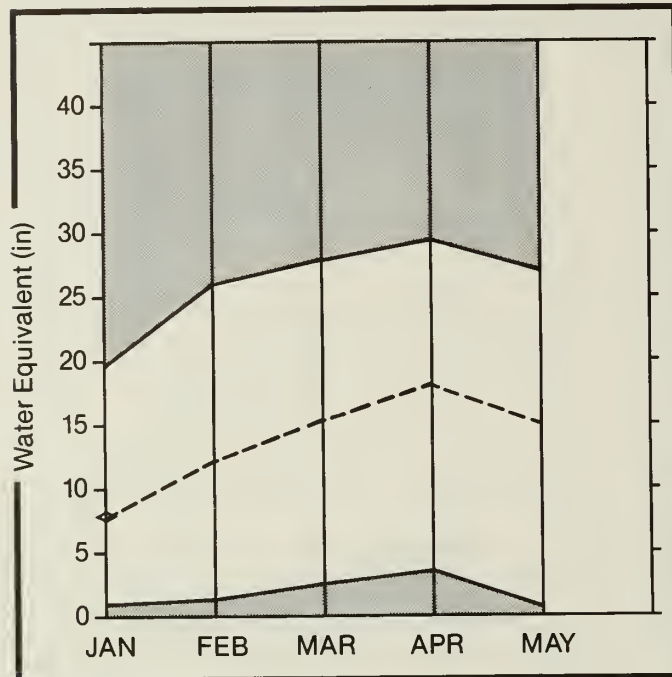
REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.

(1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.

(2) - Corrected for upstream diversions or changes in reservoir storage.

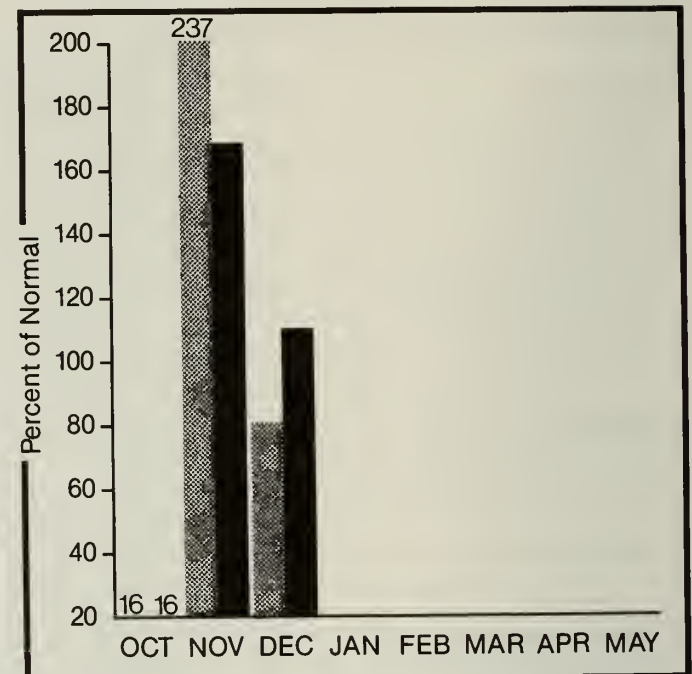
Big Wood, Little Wood, Big Lost, and Little Lost River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum



Average



Minimum



Current



Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Snowpack conditions as of January 1 are near normal throughout the basin for the first time since 1986. Current snowpack conditions range from 94 to 104% of average on all drainages except the Camas Creek basin which reported 131% of normal snowpack. The higher elevation stations reported slightly below average snowpacks while the lower elevation stations show slightly above average snow accumulation. Mountain soil profiles are very dry and are expected to absorb above normal amounts of moisture when the spring melt begins. Most of the heavy precipitation received in November fell in the form of snow in the mountainous areas and added little moisture to the soils. Normal to above normal snow accumulation will be needed for the remainder of the season to provide normal spring and summer streamflows. Currently, April - September flows are forecast to be 95 to 100% of average. Reservoir storage is well below normal on all major reservoirs. Magic Reservoir reports the lowest volume with 19% of average and only 9% of capacity.

BIG WOOD, LITTLE WOOD, BIG LOST, AND LITTLE LOST RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
BIG WOOD nr Bellevue	APR-SEP	210	97	270	147	275	143	217
	APR-JUL	193	96	255	134	255	130	202
MAGIC RESERVOIR inflow	APR-SEP	335	99	420	250	510	159	338
	APR-JUL	320	99	395	235	485	153	322
LITTLE WOOD nr Carey	APR-SEP	107	100	137	77	144	70	107
	APR-JUL	99	100	128	70	134	64	99
BIG LOST at Howell Ranch nr Chilly	APR-SEP	215	98	260	180	305	127	219
	APR-JUL	190	99	230	155	265	113	192
	APR-JUN	147	99	174	122	205	88	148
BIG LOST b1 Mackay Reservoir (2)	APR-SEP	188	96	235	153	265	112	195
LITTLE LOST b1 Wet Cr.	APR-SEP	38	100	46	30	53	28	38
	APR-JUL	31	100	38	24	43	18.6	31
LITTLE LOST nr Howe	APR-SEP	42	95	49	37	60	24	44
	APR-JUL	32	97	37	28	45	18.8	33

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
MAGIC	191.5	17.2	10.1	89.0	Big Wood ab Magic	10	152	96
LITTLE WOOD	30.0	6.9	8.8	13.5	Camas Creek	4	284	131
CAREY VALLEY		NO REPORT			Big Wood Total	13	178	104
MACKAY	44.5	16.1	20.5	26.4	Little Wood River	4	167	104
					Fish Creek	0	0	0
					Big Lost River	4	140	94
					Little Lost River	4	136	101

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.

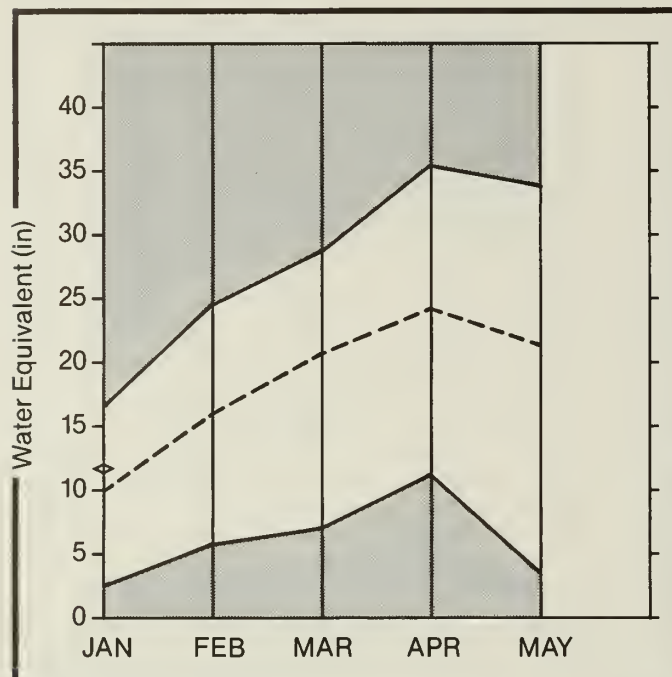
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(1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.

(2) - Corrected for upstream diversions or changes in reservoir storage.

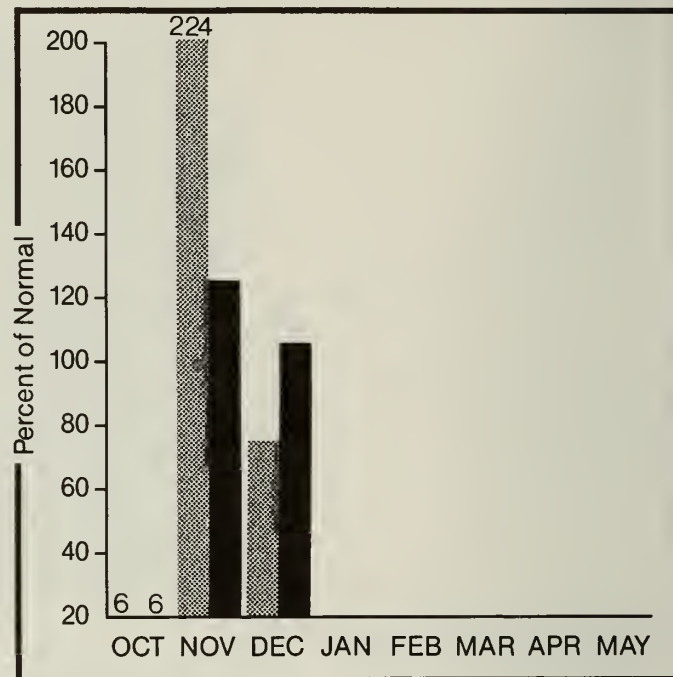
Willow Creek, Blackfoot, Upper Snake, and Portneuf River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum
Minimum

Average
Current

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

Snow measurements taken near January 1 show snowpack conditions vary widely in the basin but are generally near or above average for January 1. Basin snowpacks range from 90% of normal on the Greys River to 153% on the Beaver-Camas Creek basin near Dubois. The exception is the Salt River basin which reports only 74% of normal snowpack. Mountain soil profiles are very dry and are expected to absorb above normal amounts of moisture when the spring melt begins. Most of the heavy precipitation received in November fell in the form of snow in the mountainous areas and added little moisture to the soil. Currently, April - September streamflows are forecast to be above average, ranging from 101% on the Falls River to 110% on the Snake nr Moran. Reservoir storage is below normal on all major reservoirs in the Upper Snake basin ranging from 46 to 86% of average (39-71% of capacity) with the exception of Jackson Lake which has only 17% of average storage and 14% of capacity.

WILLOW CREEK, BLACKFOOT, UPPER SNAKE, AND FORTNEUF RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
HENRYS FORK nr Ashton (2)	APR-SEP	790	106	880	700	895	685	746
	APR-JUL	590	106	680	500	670	510	557
HENRYS FORK nr Rexburg (2)	APR-SEP	1620	102	1880	1330	2030	1220	1595
	APR-JUL	1280	102	1520	1040	1610	965	1260
FALLS nr Squirrel	APR-JUL	375	101			470	280	373
TETON ab S Leigh Ck nr Driggs	APR-SEP	205	106	245	160	245	166	194
	APR-JUL	153	106	188	118	182	124	145
TETON nr St. Anthony	APR-SEP	490	102	535	450	570	395	479
	APR-JUL	395	102	435	355	465	320	387
SNAKE nr Moran (1)	APR-SEP	975	110	1120	840	1150	805	888
PALISADES RESERVOIR inflow (1)	APR-SEP	4130	107	4750	3550	5320	2940	3852
SNAKE nr Haise (2)	APR-SEP	4420	107	5290	3550	5700	3090	4142
	APR-JUL	3760	107	4610	2910	4850	2630	3524
SNAKE nr Blackfoot (2)	APR-SEP	5960	105	7210	4710	7660	4260	5680
	APR-JUL	4800	105	5860	3740	6220	3420	4589
FORTNEUF at Topaz	MAR-SEP	118	108	138	102	162	74	109
	MAR-JUL	95	108	112	79	130	60	88

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
ISLAND PARK	127.6	67.0	93.9	88.9	Camas-Beaver Creeks	4	255	153
GRASSY LAKE	15.2	8.2	8.5	10.4	Henrys Fork River	10	186	132
JACKSON LAKE	624.4	87.5	83.4	525.6	Teton River	7	178	111
PALISADES	1357.0	469.6	682.5	1013.1	Snake ab Palisades Res	18	146	108
AMERICAN FALLS	1700.0	664.2	829.0	1002.4	Snake ab Jackson Lake	9	155	123
BROWNLEE	975.3	893.2	738.9	825.8	Gros Ventre River	2	138	105
BLACKFOOT	348.7	136.4	235.3	230.6	Greys River	3	136	90
HENRY'S LAKE	90.4	64.0	75.0	74.0	Salt River	1	141	74
PIRIE	96.5	39.1	45.4	45.4	Willow Creek	10	245	138
					Blackfoot River	4	204	120
					Portneuf River	4	218	129
					Toponce Creek	2	0	0

WET SUBS. and DRY SUBS. represent 120 and 70 percent subsequent precipitation events respectively.

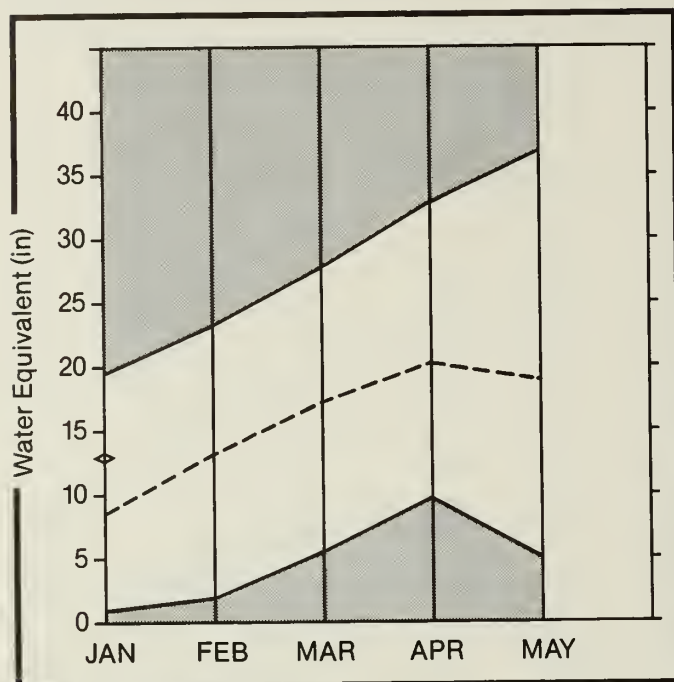
REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.

(1) - REAS. MAX. and REAS. MIN. forecasts are for 8% and 95% exceedance levels.

(2) - Corrected for upstream diversions or changes in reservoir storage.

Southside Snake River Basin

Mountain snowpack* (inches)



*Based on selected stations

Maximum



Average



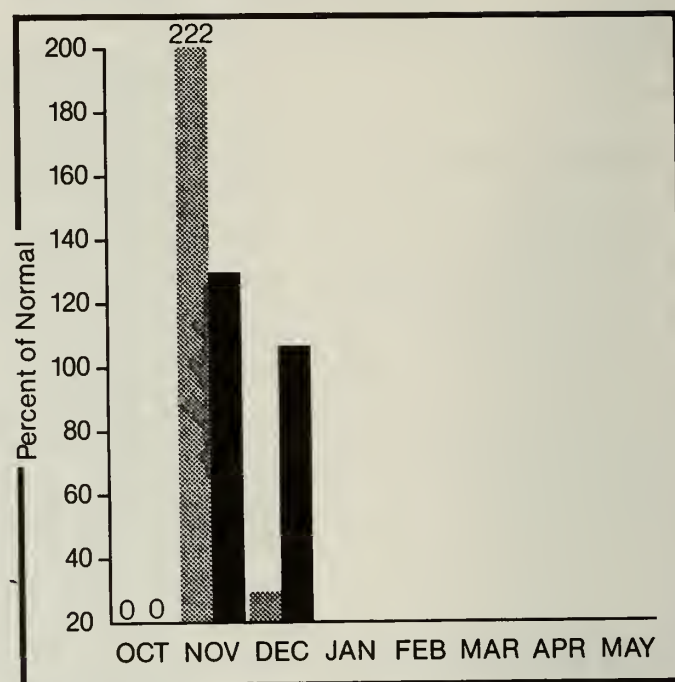
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Snowpack conditions are well above normal throughout the basin for January 1, bringing an end to two years of below average conditions. Currently, snowpacks range from 136% of average on the Salmon Falls Creek drainage to 169% on the Owyhee basin. Soil moisture conditions, however, are very dry and soil profiles are expected to absorb above normal amounts of moisture when the spring melt begins. Most of the heavy precipitation received in November fell in the form of snow and added little moisture to the mountain soils. March - September and April - September streamflows are forecast to be slightly above normal, ranging from 113 to 124% of average. Current storage is very low in the major reservoirs in the basin ranging from only 15% of average (8% of capacity) in Owyhee Reservoir to 40% of average (10% of capacity) in Salmon Falls Creek Reservoir.

SOUTHSIDE SNAKE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
OAKLEY RESERVOIR inflow	APR-SEP	41	124	49	33	54	28	33
	APR-JUL	36	124	43	28	48	14	29
SALMON FALLS CK nr San Jacinto	MAR-SEP	117	115	147	86	157	77	102
	MAR-JUL	112	115	140	83	149	73	97
	MAR-JUN	105	115	130	79	140	69	91
BRUNEAU nr Hot Spring	MAR-SEP	295	113	355	235	405	186	260
	MAR-JUL	280	113	345	215	385	178	248
OWYHEE nr Gold CK (2)	APR-JUL	33	118	44	23	49	17.9	28
OWYHEE nr Owyhee (2)	APR-JUL	100	116	137	63	163	37	86
OWYHEE nr Rome (2)	APR-JUL	445	120	510	370	640	250	371
OWYHEE RESERVOIR inflow (1)	APR-SEP	525	115	595	455	760	290	455
	APR-JUL	490	115	675	305	710	270	427

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
OAKLEY	77.4	8.0	7.3	23.7	Raft River	2	244 150
SALMON FALLS	182.6	17.8	33.6	44.9	Goose-Trapper Creeks	2	292 158
OWYHEE	715.0	58.8	166.8	394.6	Salmon Falls Creek	9	172 136
					Bruneau River	8	174 149
					Owyhee River	11	219 169

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.

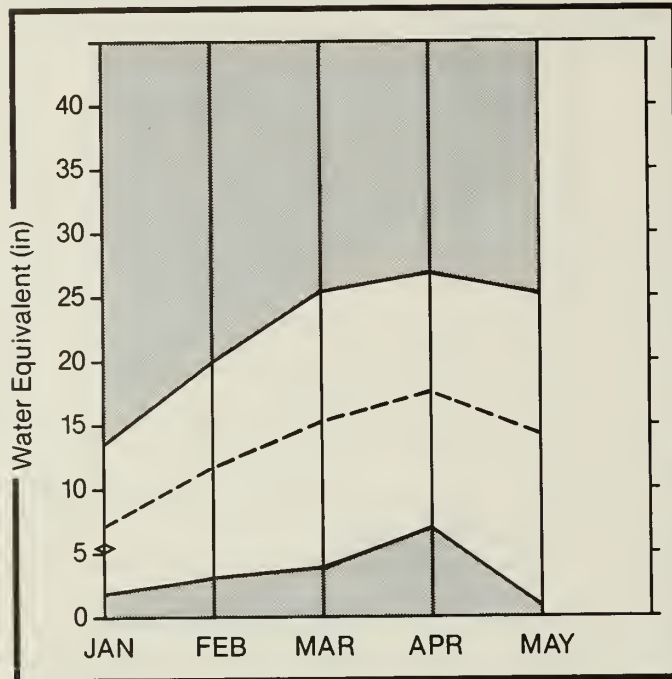
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(2) - Corrected for upstream diversions or changes in reservoir storage.

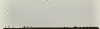
Great Basin

Mountain snowpack* (inches)



*Based on selected stations

Maximum



Average



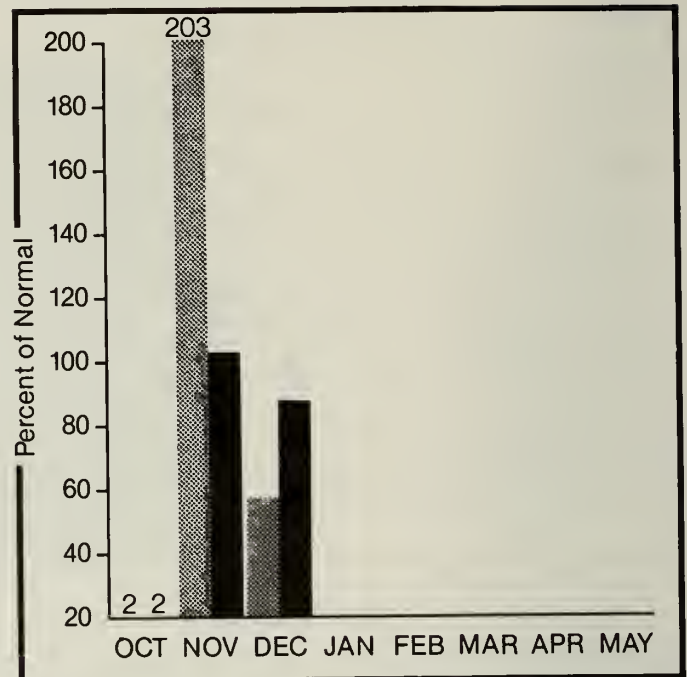
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Snowpack condition as of January 1 are near to slightly below normal throughout the basin ranging from 80% of average on the Montpelier Creek basin to 100% on the Cub River. Mountain soil profiles are much drier than normal and are expected to absorb above normal amounts of moisture when the spring melt begins. Near or above normal snow accumulation will be needed for the remainder of the winter to produce normal runoff volumes for the upcoming season. Currently, April - September streamflow volumes are forecast to be slightly below normal, ranging from 71 to 95% of average. Reservoir storage is below normal with Bear Lake reporting 80% of average (56% of capacity) and Montpelier Creek reporting 33% of average and only 18% of capacity.

GREAT BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	HIST PROBABLY (1000AF)	HIST PROBABLY (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
BEAR RIVER near Harer	APR-SEP	220	71	300	127	395	118	310
MONTPELIER CK nr Montpelier	APR-SEP	12.0	86	15.3	8.4	18.3	5.7	13.2
CUB RIVER near Preston	APR-SEP	49	95	58	39	70	28	52
	APR-JUL	44	94	52	36	60	28	47

RESERVOIR STORAGE (1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **	THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	% OF AVERAGE
BEAR LAKE	1421.0	797.5	1001.0	992.6		Bear River (above Harer)	9	144	88
MONTPELIER CREEK	4.0	0.6	1.1	1.8		Montpelier Creek	7	135	80
						Mink Creek	1	133	90
						Cub River	3	178	100
						Malad River	0	0	0

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.

REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.

(1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.

(2) - Corrected for upstream diversions or changes in reservoir storage.

SNOW DATA MEASUREMENTS

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
UPPER COLUMBIA BASIN							WATERSHED I						
ABOVE BURKE	4100	12/28/88	---	6.7E	3.2	8.4	CLEARWATER BASIN						
ABOVE ROLAND	4350	12/28/88	---	9.0E	6.2	12.9	CAYUSE AIRSTRIP	3500	12/27/88	19	4.5	2.8	5.5
BEAR MOUNTAIN	5400	12/30/88	---	19.8E	15.4	27.5	COOL CREEK	6250	12/27/88	64	17.9	10.5	24.0
BEAR MTN PILLOW	5400	1/01/89	---	20.1	15.6	28.2	COOL CREEK PILLOW	6280	1/01/89	---	19.9	10.4	22.4
BENTON MEADOW	2370	12/29/88	11	1.5	1.0	3.0	CRATER MEADOWS	5960	12/27/88	57	16.1	8.2	19.1
BENTON SPRING	4920	12/29/88	29	6.3	5.1	8.6	CRATER MDWS PILLOW	5960	1/01/89	---	19.1	9.1	19.7
BREEZY SADDLE	5010	12/27/88	43	10.5	7.1	12.2	CROOKED FORK	3610	1/03/89	32	6.2	4.2	5.2
COPPER RIDGE	4820	12/30/88	---	8.8E	5.3	10.5	ELK BUTTE	5550	1/03/89	66	16.0	5.8	15.6
FORTY-NINE MEADOWS	4830	12/27/88	---	10.9E	7.1	12.8	ELK BUTTE PILLOW	5550	1/01/89	---	16.1	6.9	17.6
FOURTH OF JULY SUM	3200	12/28/88	15	2.8	2.7	3.7	FISH LAKE AIRSTRIP	5650	12/27/88	56	14.8	10.2	17.3
HUMBOLDT GULCH	4250	12/28/88	22	4.2	2.8	6.4	FORTY-NINE MEADOWS	4830	12/27/88	---	10.9E	7.1	12.8
HUMBOLDT GLCH PILLOW	4250	1/01/89	---	5.3	---	5.4	HEMLOCK BUTTE	5810	12/27/88	59	15.5	8.5	21.4
LOOKOUT	5140	12/28/88	38	9.9	7.6	14.5	HEMLOCK BUTTE PILLOW	5810	1/01/89	---	20.0	8.2	19.5
LOOKOUT PILLOW	5140	1/01/89	---	11.5	7.1	14.6	LOLO PASS	5240	1/03/89	43	10.0	6.6	11.9
LOST LAKE	6110	12/27/88	66	18.9	11.1	25.2	LOST LAKE	6110	12/27/88	66	18.9	11.1	25.2
LOST LAKE PILLOW	6110	1/01/89	---	22.9	12.7	29.5	LOST LAKE PILLOW	6110	1/01/89	---	22.9	12.7	29.5
LOWER SANDS CREEK	3120	12/28/88	---	5.7E	3.3	7.6	MEADOW LAKE	9150	12/30/88	---	6.0E	5.2	8.5
MOSQUITO RIDGE	5200	12/30/88	---	13.2E	9.9	17.1	MOUNTAIN MEADOWS	6360	12/30/88	---	7.4E	4.8	11.0
MOSQUITO PILLOW	5200	1/01/89	---	14.3	9.3	17.0	MOUNTAIN MDWS PILLOW	6360	1/01/89	---	8.5	5.6	12.6
ROLAND SUMMIT	5120	12/28/88	---	12.4E	8.5	16.8	PIERCE R.S.	3080	1/03/89	28	5.2	2.0	4.5
SCHWEITZER BASIN	6090	12/30/88	---	19.5E	17.6	22.7	SAVAGE PASS	6170	1/03/89	45	10.4	8.0	11.3
SCHWEITZER BN PILLOW	6090	1/01/89	---	22.4	12.8	23.8	SAVAGE PASS PILLOW	6170	1/01/89	---	11.0	8.2	11.2
SCHWEITZER BOWL	4800	12/30/88	---	12.4E	9.9	13.8	SHANGHAI SUMMIT	4570	12/27/88	41	10.4	3.7	11.0
SCHWEITZER RIDGE	6200	12/30/88	---	18.5E	15.7	21.3	SHANGHAI SUM PILLOW	4570	1/01/89	---	13.3	4.0	12.4
SHERWIN	3200	1/02/89	37	7.2	2.6	5.6	SHERWIN	3200	1/02/89	37	7.2	2.6	5.6
SHERWIN PILLOW	3200	1/01/89	---	6.1	2.2	5.5	SHERWIN PILLOW	3200	1/01/89	---	6.1	2.2	5.5
SUNSET	5540	12/30/88	---	10.1E	5.3	14.7							
SUNSET PILLOW	5540	1/01/89	---	12.3	5.4	16.1							
SALMON BASIN							WATERSHED II						
BANNER SUMMIT	7040	12/30/88	---	12.4E	8.4	14.4	ATLANTA SUMMIT	7600	12/28/88	58	15.2	9.8	15.5
BANNER SUMMIT PILLOW	7040	1/01/89	---	11.1	7.5	12.6	ATLANTA SUM PILLOW	7580	1/01/89	---	14.4	9.5	13.3
BEAR BASIN	5350	12/30/88	---	9.0E	2.0	8.3	ATLANTA TOWNSITE	5370	12/28/88	21	3.7	2.0	---
BEAR BASIN PILLOW	5350	1/01/89	---	10.1	1.6	8.1	BANNER SUMMIT	7040	12/30/88	---	12.4E	8.4	14.4
BIG CREEK SUMMIT	6580	12/30/88	---	14.4E	9.6	15.4	BANNER SUMMIT PILLOW	7040	1/01/89	---	11.1	7.5	12.6
BIG CREEK SUM PILLOW	6580	1/01/89	---	13.7	8.2	13.2	BAD BEAR	4940	12/28/88	29	6.4	1.9	5.7
BOULDER CREEK	5440	12/31/88	---	9.5E	5.0	10.0	BEAR BASIN	5350	12/30/88	---	9.0E	2.0	8.3
BREEZY SADDLE	5010	12/27/88	43	10.5	7.1	12.2	BEAR BASIN PILLOW	5350	1/01/89	---	10.1	1.6	8.1
BRUNDAGE MOUNTAIN	7560	12/30/88	---	16.1E	11.0	20.8	BEAR SAOOLE	6180	12/30/88	---	16.0E	5.6	12.4
BRUNO CREEK	7920	1/03/89	31	7.1	6.0	9.1	BEAR SADDLE PILLOW	6180	1/01/89	---	16.3	6.8	12.6
DEAWOOD SUMMIT	6860	12/28/88	61	16.7	12.4	21.2	BIG CREEK SUMMIT	6580	12/30/88	---	14.4E	9.6	15.4
DEADWOOD SUM PILLOW	6860	1/01/89	---	16.4	12.1	23.0	BIG CREEK SUM PILLOW	6580	1/01/89	---	13.7	8.2	13.2
GALENA SUMMIT	8780	12/27/88	37	9.3	6.5	11.0	BOGUS BASIN	6340	12/29/88	50	13.2	3.5	9.9
GALENA SUMMIT PILLOW	8780	1/01/89	---	8.4	6.7	8.9	BOGUS BASIN ROAD	5540	12/29/88	27	6.7	.2	3.1
GIBBONS PASS	7100	12/30/88	35	9.4	5.9	9.7	BOULDER CREEK	5440	12/31/88	---	9.5E	5.0	10.0
MEADOW LAKE	9150	12/30/88	---	6.0E	5.2	8.5	BRUNDAGE MOUNTAIN	7560	12/30/88	---	16.1E	11.0	20.8
MEADOW LAKE PILLOW	9150	1/01/89	---	6.6	5.1	8.7	BRUNOAGE RESV PILLOW	4500	1/01/89	---	10.4	5.8	---
MILL CREEK SUMMIT	8800	12/30/88	---	7.6E	6.3	10.8	CAMAS CREEK DIVIDE	5710	12/31/88	38	8.6	3.6	---
MILL CREEK ST PILLOW	8800	1/01/89	---	7.5	5.9	10.4	CHIMNEY CREEK	6400	12/31/88	37	9.0	3.3	7.5
MOONSHINE	7440	12/28/88	22	4.9	3.2	4.8	COUCH SUMMIT	6840	12/31/88	---	10.0E	4.4	8.0
MOONSHINE PILLOW	7440	1/01/89	---	5.3	3.8	4.6	COZY COVE	5380	12/28/88	26	5.2	3.5	7.2
MOOSE CREEK	6200	1/01/89	32	7.2	4.4	7.4	COZY COVE PILLOW	5380	1/01/89	---	6.6	---	---
MOOSE CR PILLOW	6200	1/01/89	---	7.5	4.7	7.6	CRAWFORD R.S.	4860	12/27/88	24	4.6	1.0	3.1
MORGAN CREEK	7600	12/30/88	---	4.8E	4.2	6.2	DEADMAN GULCH	5600	12/28/88	41	10.1	3.2	7.7
MORGAN CREEK PILLOW	7600	1/01/89	---	3.9	4.1	5.8	DEADWOOD AIRSTRIP	5360	12/30/88	---	5.5E	3.7	7.0
ROCK FLAT SUMMIT	5310	12/30/88	---	8.7E	2.0	7.6	DEADWOOD SUMMIT	6860	12/28/88	61	16.7	12.4	21.2
SADDLE MOUNTAIN	7940	12/30/88	37	10.3	6.4	11.0	DEADWOOD SUM PILLOW	6860	1/01/89	---	16.4	12.1	23.0
SECESH SUMMIT	6520	12/27/88	47	12.7	8.3	15.5	DOLLARHIDE SUMMIT	8420	12/28/88	45	11.3	6.5	11.5
SECESH SUMMIT PILLOW	6520	1/01/89	---	12.7	8.1	15.6	DOLLARHIDE SM PILLOW	8420	1/01/89	---	12.8	6.6	11.6
SQUAW MEADOW	5900	12/27/88	46	11.8	8.0	15.8	GRAHAM GUARD STATION	5690	12/28/88	26	5.5	3.2	7.1
VIENNA MINE	8860	12/28/88	50	13.6	10.6	15.9	GRAHAM G.S. PILLOW	5690	1/01/89	---	6.2	2.0	7.8
VIENNA MINE PILLOW	8860	1/01/89	---	13.4	10.0	15.9	IDAHO CITY TOWNSITE	4000	12/28/88	18	3.9	1.1	2.7
WEBB CREEK	4720	12/27/88	18	4.5	---	5.0	JACKSON PEAK	7070	12/28/88	46	11.9	7.6	14.6
WEST BRANCH	5560	12/31/88	45	10.5	4.8	11.2	JACKSON PEAK PILLOW	7070	1/01/89	---	12.6	6.9	12.9
WEST BRANCH PILLOW	5560	1/01/89	---	11.5	5.3	11.0	LAKE FORK	5290	12/27/88	28	5.9	1.5	7.1
							LITTLE CAMAS FLAT	4940	12/31/88	26	5.9	.5	3.2
							MOORES CREEK SUMMIT	6100	12/28/88	53	14.1	7.1	13.9
							MOORES CK SUM PILLOW	6100	1/01/89	---	14.5	7.4	14.4
							PRAIRIE	4800	12/29/88	25	5.0	.7	3.0
							PRAIRIE PILLOW	4800	1/01/89	---	3.0	.7	---
							ROAD CREEK	5380	12/28/88	19	3.6	1.4	4.3
							ROCK FLAT SUMMIT	5310	12/30/88	---	8.7E	2.0	7.6
							SECESH SUMMIT	6520	12/27/88	47	12.7	8.3	15.5
							SECESH SUMMIT PILLOW	6520	1/01/89	---	12.7	8.1	15.6
							SOLDIER R.S.	5740	12/31/88	37	6.9	3.0	5.5
							SOLDIER R.S. PILLOW	4330	1/01/89	---	8.5	3.1	---
							SQUAW FLAT	6240	12/30/88	---	10.2E	6.1	9.9
							SQUAW FLAT PILLOW	6240	1/01/89	---	9.7	4.9	8.4
							SQUAW MEADOW	5900	12/27/88	46	11.8	8.0	15.8
							TRINITY MOUNTAIN	7770	12/28/88	74	20.3	12.4	19.6
							TRINITY MTN. PILLOW	7770	1/01/89	---	20.0	12.2	19.0
							TRIPOD SUMMIT	5260	12/27/88	45	9.4E	3.2	8.0
							VIENNA MINE	8860	12/28/88	50	13.6	10.6	15.9
							VIENNA MINE PILLOW	8860	1/01/89	---	13.4	10.0	15.9
							WEST BRANCH	5560	12/31/88	45	10.5	4.8	11.2
							WEST BRANCH PILLOW	5560	1/01/89	---	11.5	5.3	11.0
							WATERSHED IV						

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
BIG WOOD, LITTLE WOOD, BIG LOST, AND LITTLE LOST BASINS							SOUTHSIDE SNAKE BASIN						
WATERSHED V							WATERSHED VII						
BEAR CANYON	7900	12/30/88	---	7.8E	6.6	8.3	ANTELOPE RIDGE	6180	12/31/88	24	6.3	1.0	---
BEAR CANYON PILLOW	7900	1/01/89	---	7.2	5.5	7.8	BADGER GULCH	6660	12/30/88	---	8.4E	2.4	4.8
CAMAS CREEK DIVIDE	5710	12/31/88	38	8.6	3.6	---	BEAR CREEK	7800	12/30/88	---	12.6E	6.5	8.9
CHIMNEY CREEK	6400	12/31/88	37	9.0	3.3	7.5	BEAR CK SNOTEL	7800	1/01/89	---	11.8	---	7.9
COPPER BASIN	7640	12/30/88	---	3.1E	1.6	3.3	BOSTETTER R.S.	7500	12/30/88	---	14.1E	5.3	9.4
COUCH SUMMIT	6840	12/31/88	---	10.0E	4.4	8.0	BOSTETTER RS PILLOW	7500	1/01/89	---	12.3	7.3	7.6
DOLLARHIDE SUMMIT	8420	12/28/88	45	11.3	6.5	11.5	CLEAR CREEK MEADOWS	9420	12/30/88	---	14.7E	6.1	9.5
DOLLARHIDE SM PILLOW	8420	1/01/89	---	12.8	6.6	11.6	DEADLINE	7400	12/29/88	31	9.5	5.7	9.4
GALENA	7440	12/30/88	---	8.2E	4.8	8.4	DEADLINE SDUTH	7450	12/29/88	36	11.6	6.0	10.7
GALENA PILLOW	7440	1/01/89	---	7.9	6.0	8.3	GDAT CREEK	8800	12/30/88	---	11.6E	6.9	7.4
GALENA NEW	7470	12/27/88	38	8.8	5.2	8.8	HDWELL CANYON	7980	12/30/88	---	17.0E	6.9	11.6
GALENA SUMMIT	8780	12/27/88	37	9.3	6.5	11.0	HDWELL CANYON PILLOW	7980	1/01/89	---	14.9	4.9	9.5
GALENA SUMMIT PILLOW	8780	1/01/89	---	8.4	6.7	8.9	HUMMINGBIRD SPRINGS	8850	12/30/88	---	15.9E	11.2	10.3
GARFIELD R.S.	6560	12/28/88	28	5.2	1.9	4.5	LANGFORD FLAT CREEK	5980	12/29/88	21	4.3	2.2	2.6
GARFIELD R.S. PILLOW	6560	1/01/89	---	5.5	2.6	4.2	MAGIC MOUNTAIN	6880	12/29/88	42	11.1	4.9	8.2
GRAHAM RANCH	6270	12/27/88	34	6.9	2.4	6.0	MAGIC MTN PILLOW	6880	1/01/89	---	13.2	5.3	8.2
HILTS CREEK	8000	12/29/88	24	5.2	4.0	5.4	MUD FLAT	5730	12/31/88	28	6.2	.8	3.1
HILTS CREEK PILLOW	8000	1/01/89	---	6.5	5.4	6.3	MUD FLAT PILLOW	5730	1/01/89	---	5.6	1.6	2.3
HYNDMAN CREEK	7440	12/30/88	---	6.9E	5.1	6.8	POLE CREEK R.S.	8330	12/30/88	---	12.9E	8.9	8.6
HYNDMAN PILLOW	7440	1/01/89	---	5.7	4.6	5.4	SEVENTYSIX CK SNOTEL	7100	1/01/89	---	6.4S	2.5	6.1
LITTLE CAMAS FLAT	4940	12/31/88	26	5.9	.5	3.2	SHDSHORE BASIN	5810	12/29/88	---	4.5E	2.3	3.0
LOST-WOOD DIVIDE	7900	12/30/88	---	9.3E	7.1	10.1	SOUTH MOUNTAIN	6500	12/29/88	46	13.1	3.1	6.3
LOST-WOOD DVD PILLOW	7900	1/01/89	---	10.1	7.2	10.1	SOUTH MTN PILLOW	6500	1/01/89	---	16.5	3.8	5.5
MASCOT MINE	7780	12/30/88	---	6.0E	5.0	7.0							
MOONSHINE	7440	12/28/88	22	4.9	3.2	4.8							
MOONSHINE PILLOW	7440	1/01/89	---	5.3	3.8	4.6							
MOUNT BALDY	8820	12/30/88	44	10.3	6.4	9.3							
MULDOON	6320	12/28/88	21	3.8	1.9	3.4							
SAWMILL CANYON	7000	12/28/88	19	3.6	3.4	3.8							
SOLDIER R.S.	5740	12/31/88	37	6.9	3.0	5.5							
SOLDIER R.S. PILLOW	4330	1/01/89	---	8.5	3.1	---							
STICKNEY MILL	7430	12/30/88	---	4.0E	2.0	4.1							
STICKNEY MILL PILLOW	7430	1/01/89	---	3.6	1.7	3.6							
SWEDE PEAK	7640	12/28/88	39	8.4	4.7	8.1							
SWEDE PEAK PILLOW	7640	1/01/89	---	8.9	4.7	6.4							
VIENNA MINE	8860	12/28/88	50	13.6	10.6	15.9							
VIENNA MINE PILLOW	8860	1/01/89	---	13.4	10.0	15.9							
WET CREEK SUMMIT	7680	12/29/88	24	5.4	3.4	4.9							
WILLOW, BLACKFOOT, UPPER SNAKE, AND PORTNEUF BASINS							GREAT BASIN						
WATERSHED VI							WATERSHED VIII						
ASPEN GROVE	6500	12/29/88	---	6.9E	3.0	---	CUB RIVER R.S.	5450	12/27/88	27	4.5	2.3	4.1
BIG SPRINGS	6400	12/29/88	40	10.5	4.9	8.3	EMIGRANT SUMMIT	7390	12/29/88	43	9.2	6.9	10.2
BIRCH CREEK	6800	12/28/88	27	5.9	2.3	4.0	EMIGRANT SUM PILLOW	7390	1/01/89	---	8.7	6.6	11.3
BLACK BEAR	7950	12/28/88	65	20.2	13.4	17.6	FRANKLIN BASIN	8020	12/27/88	45	9.4	5.4	10.2
BLUE LEDGE MINE	6900	12/30/88	---	12.2E	5.9	8.1	FRANKLIN BSN PILLOW	8040	1/01/89	50	11.4	6.5	11.4
BLUE RIDGE	6780	12/28/88	44	10.8	4.1	7.3	GIVEOUT	6860	12/30/88	---	4.0E	3.0	5.2
BDNE	6200	12/28/88	25	4.9	1.5	2.8	GIVEOUT PILLOW	6840	1/01/89	---	4.4	3.1	5.0
BROCKMAN STATION	6430	12/28/88	27	6.1	2.7	4.2	GIVEOUT NEW	6930	12/30/88	---	3.5E	2.7	4.4
CAMP CREEK	6580	12/27/88	36	8.0	2.0	4.4	LITTLE BEAVER	6790	12/30/88	---	5.1E	3.7	6.1
CRAB CREEK	6860	12/30/88	---	11.4E	4.5	7.5	LDWER HOME CANYON	7640	12/30/88	---	4.4E	3.4	5.7
CRAB CREEK PILLOW	6860	1/01/89	---	12.5	4.8	7.9	MONTPELIER CREEK	6540	12/30/88	---	3.1E	2.0	3.5
FALL CREEK	6820	12/28/88	28	5.7	1.2	3.9	DXFORD MOUNTAIN	6800	12/30/88	---	4.5E	3.1	---
GRASSY LAKE	7270	1/03/89	80	19.5	11.6	15.1	OXFORD SPRING	6740	12/30/88	---	4.8E	---	4.1
GRASSY LAKE PILLOW	7270	1/01/89	---	16.0	10.3	15.8	OXFORD SPRING PILLOW	6740	1/01/89	---	5.8	3.2	4.3
INDIAN MEADOWS	9420	12/28/88	64	17.3	12.8	15.4	STRAWBERRY CREEK	5820	12/29/88	---	9.2E	---	---
ISLAND PARK	6290	12/29/88	41	8.8	4.7	6.8	UPPER HOME CANYON	8560	12/30/88	---	7.2E	5.4	9.2
ISLAND PARK PILLOW	6290	1/01/89	---	10.7	5.1	6.6	WILLOW FLAT	6070	12/27/88	34	7.3	4.2	6.9
JACKPINE CREEK	7350	12/28/88	39	10.0	6.8	---							
KILGORE	6320	12/27/88	30	6.1	2.4	4.7							
LAVA CREEK	7350	12/28/88	37	8.9	3.4	6.5							
LOWER PEBBLE	5780	12/30/88	---	6.5E	3.4	5.3							
MADISON PLATEAU	7750	12/28/88	44	11.9	7.5	9.3							
MC RENDLDS RESERVDIR	6720	12/28/88	35	8.1	4.3	8.0							
MINK CREEK	6410	12/30/88	---	9.8	4.6	8.5							
MUD CREEK	7100	12/28/88	54	12.7	4.9	7.9							
NDRTH PUTNAM	7240	12/30/88	52	13.7	---	---							
PACKSADDLE SPRING	8200	12/28/88	57	15.8	7.2	12.4							
PEBBLE CREEK	6550	12/30/88	---	8.2E	---	7.3							
PHILLIPS BENCH	8200	12/30/88	---	15.4E	8.6	14.8							
PHILLIPS BENCH PILL.	8200	1/01/89	---	14.3	7.7	13.0							
PINE CREEK PASS	6810	1/03/89	43	8.0	3.1	7.2							
SAWTELL MOUNTAIN	8720	12/29/88	72	20.8	11.5	14.6							
SHEEP MOUNTAIN	6570	12/28/88	30	6.5	3.0	4.9							
SHEEP MTN PILLOW	6570	1/01/89	---	8.4	3.6	5.8							
SLUG CREEK DIVIDE	7230	12/30/88	---	5.4E	4.0	6.9							
SLUG CK DVD PILLOW	7230	1/01/89	---	5.7	4.3	8.0							
SDMSEN RANCH	6840	12/30/88	---	5.3E	3.9	6.3							
SDMSEN RANCH PILLOW	6800	1/01/89	---	5.1	3.7	5.1							
STATE LINE	6660	1/03/89	32	7.7	3.3	6.2							
TARGHEE PASS	6980	12/30/88	---	8.8E	2.7	6.2							
TEX CREEK	6650	12/30/88	---	6.1E	2.8	5.0							
TWITCHELL CANYON	6300	12/30/88	41	10.3	3.6	5.9							
VALLEY VIEW	6680	12/29/88	39	9.7	2.9	6.4							
WHISKEY CREEK	6800	12/28/88	41	10.3	5.1	7.7							
WHITE ELEPHANT	7710	12/29/88	51	14.1	8.2	10.1							
WHITE ELEPHANT PILL	7710	1/01/89	---	16.5	8.6	11.2							
WILDHORSE DIVIDE	6490	12/30/88	---	9.0E	4.7	7.8							
WILDHORSE DVD PILLOW	6490	1/01/89	---	9.3	4.1	6.6							

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The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State	Idaho Department of Water Resources Soil and Water Conservation Districts of Idaho
Federal	U.S. Department of Agriculture Forest Service U.S. Department of Army Corps of Engineers U.S. Department of Commerce NOAA, National Weather Service U.S. Department of Interior Bureau of Reclamation Geological Survey, Water Resources Division Shoshone-Bannock Tribal Council
Local	Big Lost River Irrigation District Big Wood Irrigation Company Boise Project Board of Control Idaho Water District #01 Lewiston Orchards Irrigation District Little Wood River Irrigation District North Board of Control — Owyhee Project Salmon Falls Irrigation Company South Board of Control — Owyhee Project
Private	Cyprus Mining Company FMC Corporation Idaho Power Company Le Bois Resort Washington Water Power Company

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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**Idaho
Water Supply Outlook**

and

Federal — State — Private
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United States
Department of
Agriculture

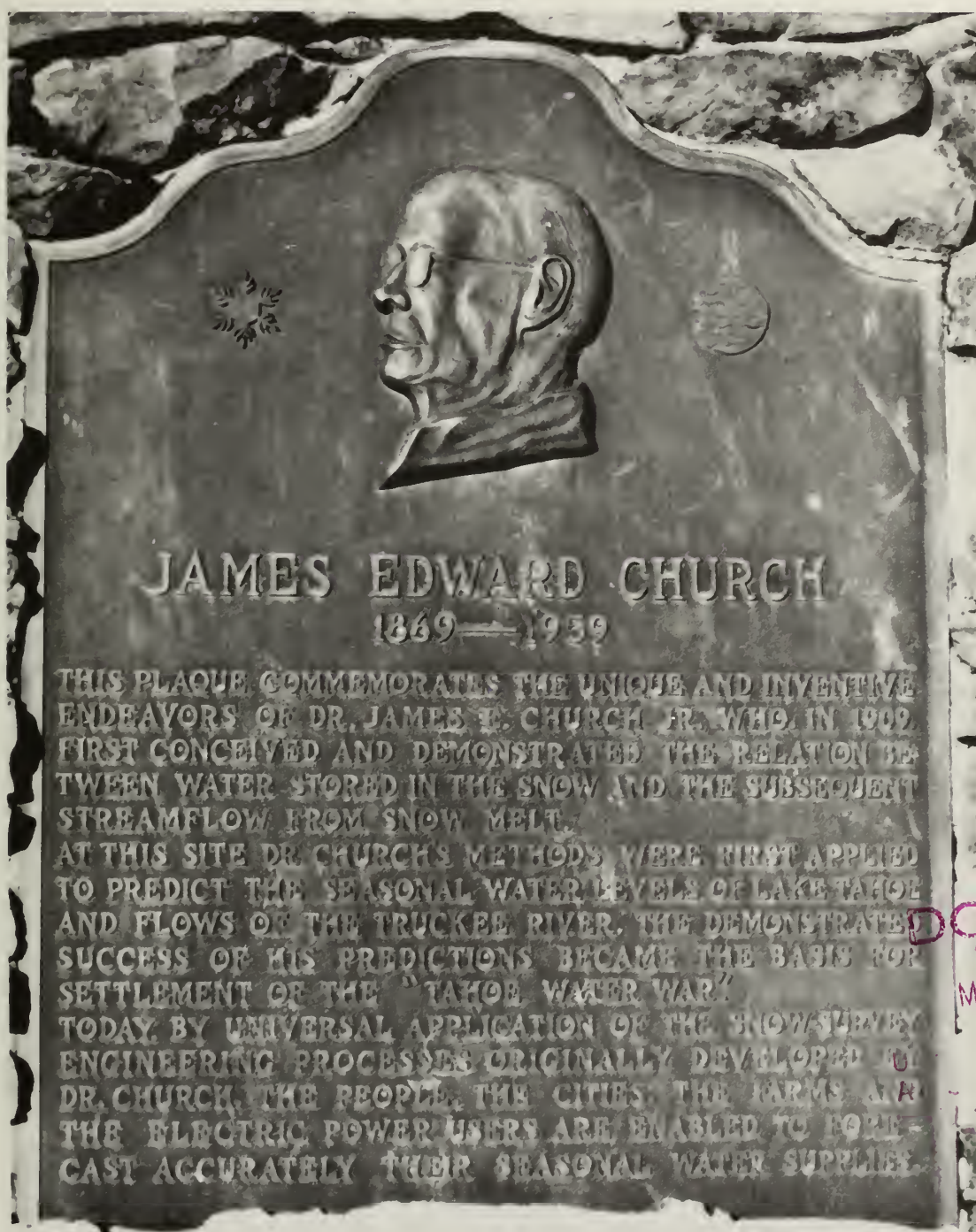
Soil
Conservation
Service

Boise,
Idaho



Idaho Water Supply Outlook

February 1, 1989



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MAR 21 1989

ILLINOIS
CHAMPAIGN

Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Soil Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

An error is associated with each forecast, and this error decreases as the season progresses and more data becomes available. To express the range of error that can be expected, "most probable" forecasts are issued along with a range representing a "reasonable minimum" and a "reasonable maximum". Actual streamflow can be expected to fall within this range in eight out of ten years. Additionally two specific scenarios are provided based on the assumption that subsequent precipitation will be "wet", above average, or "dry", below average.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola Ave., Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Building A, 3rd floor, Denver, CO 80211
Idaho	3244 Elder Street, Room 124, Boise, ID 83705
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 87102-3157
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97204
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	W. 920 Riverside, Room 360, Spokane, WA 99201-1080
Wyoming	Federal Building, 100 "B" Street, Room 3124, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209-3489.

Water supply reports published by other agencies:

California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Idaho Water Supply Outlook

and

Federal — State — Private Cooperative Snow Surveys

Issued by

Wilson Scaling
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Soil Conservation Service
Washington, D.C.

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In cooperation with

R. Keith Higginson
Director
State of Idaho
Department of Water Resources
Boise, Idaho

"Programs and assistance of the United States Department of Agriculture are available without regard to race, creed, color, sex, age, or national origin."

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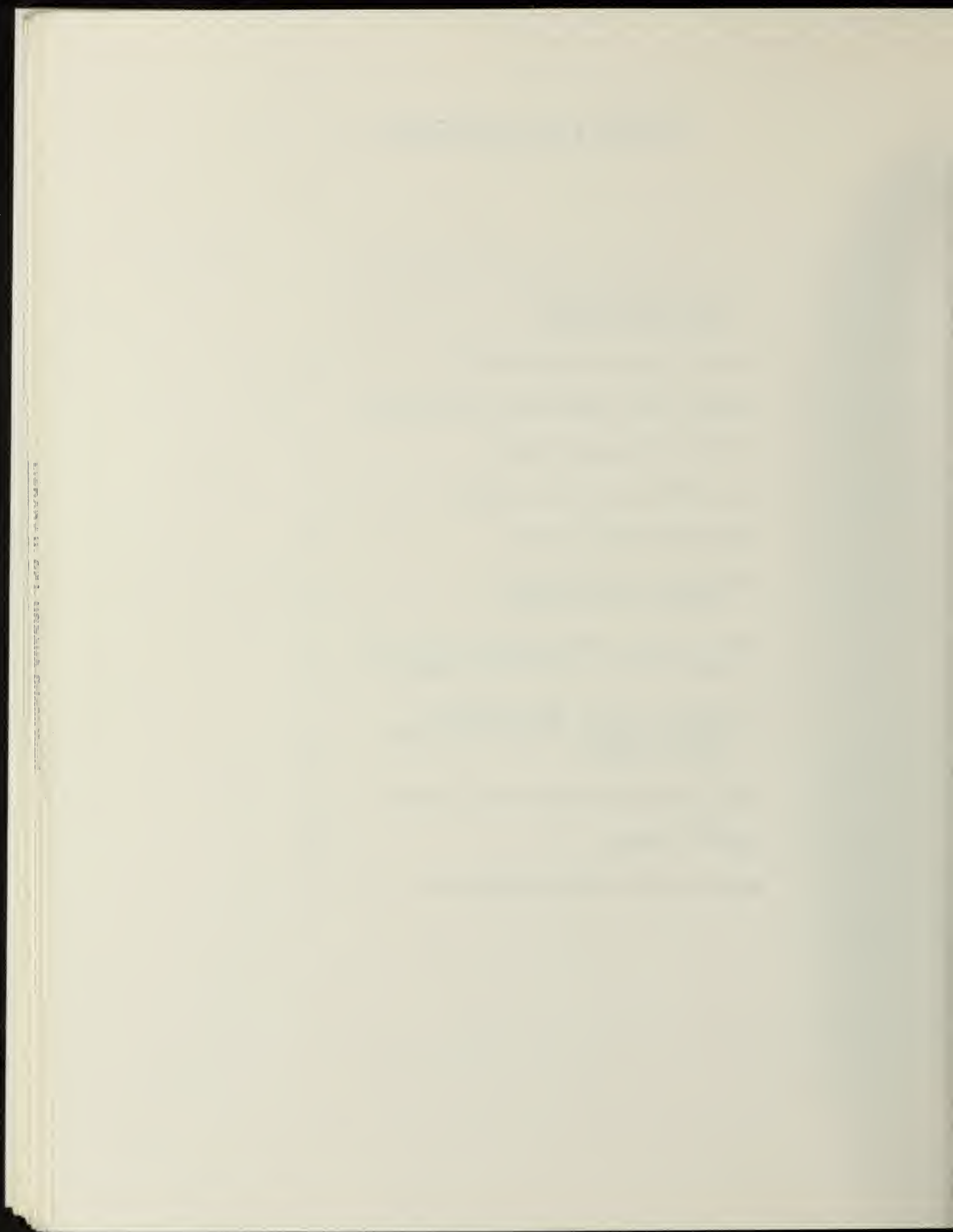
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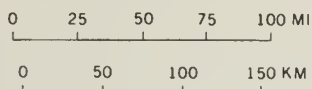
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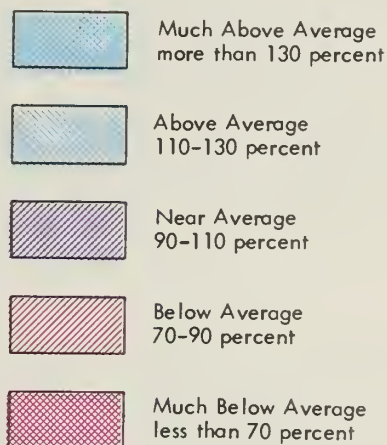
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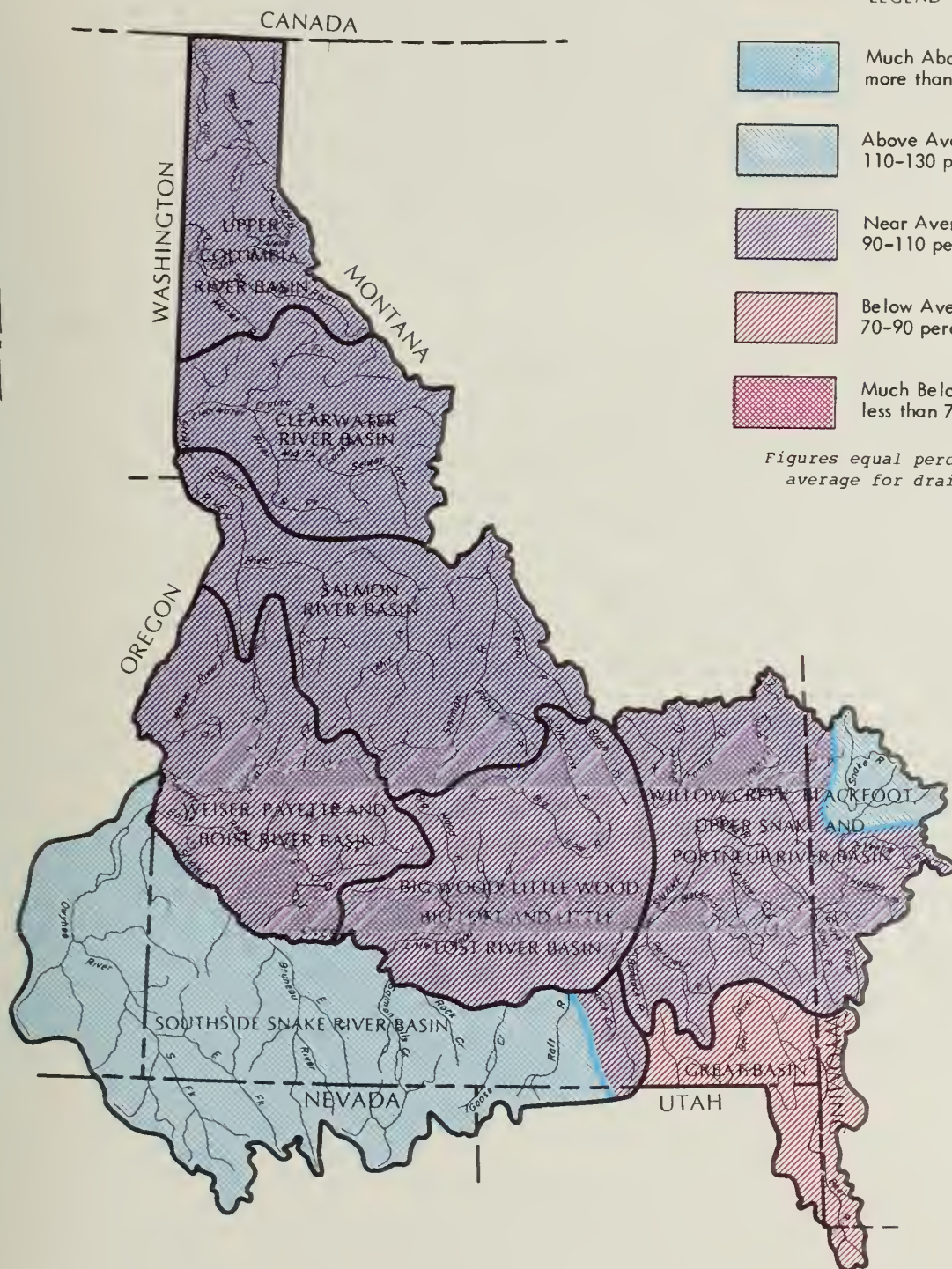


STREAMFLOW PROSPECTS
IDAHO

LEGEND



Figures equal percent of
average for drainage.



Case	Age	Sex	Site	Pathologic	Survival
1	65	M	Rectum	Adenocarcinoma	10 years
2	72	F	Rectum	Adenocarcinoma	10 years
3	68	M	Rectum	Adenocarcinoma	10 years
4	70	F	Rectum	Adenocarcinoma	10 years
5	65	M	Rectum	Adenocarcinoma	10 years
6	70	F	Rectum	Adenocarcinoma	10 years
7	68	M	Rectum	Adenocarcinoma	10 years
8	72	F	Rectum	Adenocarcinoma	10 years
9	65	M	Rectum	Adenocarcinoma	10 years
10	70	F	Rectum	Adenocarcinoma	10 years
11	68	M	Rectum	Adenocarcinoma	10 years
12	72	F	Rectum	Adenocarcinoma	10 years
13	65	M	Rectum	Adenocarcinoma	10 years
14	70	F	Rectum	Adenocarcinoma	10 years
15	68	M	Rectum	Adenocarcinoma	10 years
16	72	F	Rectum	Adenocarcinoma	10 years
17	65	M	Rectum	Adenocarcinoma	10 years
18	70	F	Rectum	Adenocarcinoma	10 years
19	68	M	Rectum	Adenocarcinoma	10 years
20	72	F	Rectum	Adenocarcinoma	10 years

GENERAL OUTLOOK

SUMMARY:

FEBRUARY 1 SNOW SURVEYS INDICATE THAT THE WINTER SNOWPACK CONTINUES TO BUILD IN A NEAR NORMAL MANNER. ABUNDANT PRECIPITATION DURING THE FIRST TWO WEEKS OF JANUARY PROVIDED NEAR TO ABOVE AVERAGE SNOWPACK BUILDUP FOR THE MONTH AS A WHOLE. AFTER TWO VERY DRY YEARS IN A ROW, WATER USERS IN THE SOUTHWESTERN CORNER OF THE STATE CAN EXPECT ADEQUATE RUNOFF THIS YEAR. SOUTHEASTERN IDAHO CONTINUES TO HOPE FOR IMPROVEMENT FOR ITS BELOW NORMAL SNOWPACK. ASSUMING NORMAL PRECIPITATION PATTERNS CONTINUE, THE REMAINDER OF THE STATE CAN EXPECT NEAR AVERAGE WATER SUPPLIES FOR THE 1989 SEASON.

SNOWPACK:

With about two-thirds of the winter snow accumulation season now behind us, snowpack conditions are reported to be near or above normal throughout the state except in the Great Basin area where below average snowpacks are reported. Heavy precipitation during the first half of January in northern Idaho resulted in improved conditions on all basins from the Salmon River north. Northern Idaho snowpacks now range from 88% of average on the Salmon River to 100% on the North Fork of the Clearwater and Priest River drainages. In the central part of the state, snowpack conditions remain near normal, ranging from 93% of average on the Big Lost basin to 110% on the Boise River. In eastern Idaho and western Wyoming, lower elevation watersheds show a slight drop from the snowpack figures reported last month while the high elevations remain about the same. February 1 snow conditions remain near or above normal for the area, ranging from 94 to 136% of average on all basins except the Salt River which only reports 79% of average snowpack. Snowpack figures on the south side of the Snake remain above to well above normal, ranging from 116% on the Raft River to 171% on the Owyhee River basin. Southeastern Idaho reports the lowest snowpacks in the state, with only 83% of average on the Cub River and Montpelier Creek drainages.

PRECIPITATION:

January weather began on an excellent note with abundant rain and snow falling over the entire state. By the end of the second week, however, the pattern changed and little additional precipitation was received for the rest of the month. The north and north central portions of the state received the most precipitation, while the southern valleys were on the dry side. Salmon received its normal complement of precipitation for the month, while several other stations in the central mountains reported 120% or better. The southwest ranged from 75% at Idaho City to only 41% at Parma. Southcentral Idaho was one of the driest areas in the state, with Fairfield reporting 53% of average and Twin Falls only 20%. The Great Basin area continues its dry trend with Aberdeen reporting only 25% of normal and Grace 60%. The only above normal area in southern Idaho was in the Upper Snake basin with Idaho Falls reporting 100% and Ashton with 124%. The statewide precipitation average was 87% of normal. Temperatures for January were above normal in the north and below normal in the south. Porthill and Lewiston averaged a 4.2 degree departure above normal, with Salmon at plus 1.7 degrees. The south reported below normal temperatures, with a minus 5.2 degree departure at Boise and a minus 4.4 degrees at Pocatello.

RESERVOIRS:

Reservoir carryover storage remains below to well below normal in all major reservoirs ranging from a low of 18% of average [11% of capacity] in Owyhee Reservoir to 98% [57% of capacity] in Cascade. Twenty-seven key reservoirs across the state report a combined storage of 69% of normal and only 44% of capacity. The lowest carryover volumes are generally found in the south central and southwestern parts of the state. The combined Upper Snake Reservoir system reports 60% of average storage and 43% of capacity on February 1, while the Boise Reservoir system reports 53% of average and only 33% of capacity. Although most reservoirs remain well below normal, most systems are expected to fill or nearly fill if we receive normal runoff for the April-July period.

STREAMFLOW:

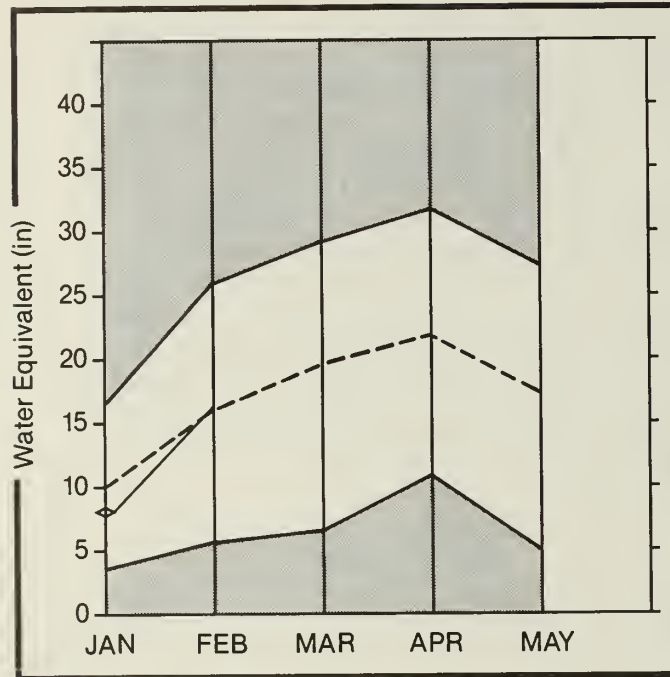
Idaho's water supply outlook continues to look good for the 1989 season. Apr-Sept streamflow projections remain near to above normal throughout most of the state, ranging from 90% of average for the Big Wood and Big Lost Rivers to 121% for the inflow to Owyhee Reservoir. The exceptions are found in the southeast corner of the state where spring and summer streamflows are expected to be below normal, ranging from 79% of normal for the Bear River nr Harer to 85% for the Cub River nr Preston. Forecasts in the northern part of the state have improved slightly from those reported a month ago and now range from 92% to 98% of normal. Forecasts in the central and eastern parts of the state show little or no change from last month and remain near normal, ranging from 90 to 113% of average. Southwestern Idaho streamflow forecasts continue to be above or well above normal, ranging from 105% on the Owyhee River nr Owyhee to 125% for the Owyhee nr Rome.

RECREATIONAL OUTLOOK:

The word is definitely optimistic. Recreational boaters can plan for plentiful water for spring and summer boating. Southwest Idaho desert boating enthusiasts can smile at February 1 snowpacks of 138% of normal on the Bruneau River and 171% on the Owyhee. Near normal snowpack on the Salmon and Clearwater River drainages has river runners planning for a "normal" recreational season. Both the levels and the timing of the runoff will depend on spring and early summer temperatures and precipitation. Because soils were very dry going into the winter, much of the snowmelt will soak into the ground before streams will respond. With approximately one-third of the snow accumulation season remaining, near normal snowfall is needed to ensure the abundant recreational opportunities expected.

Upper Columbia Basin

Mountain snowpack* (inches)



*Based on selected stations

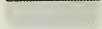
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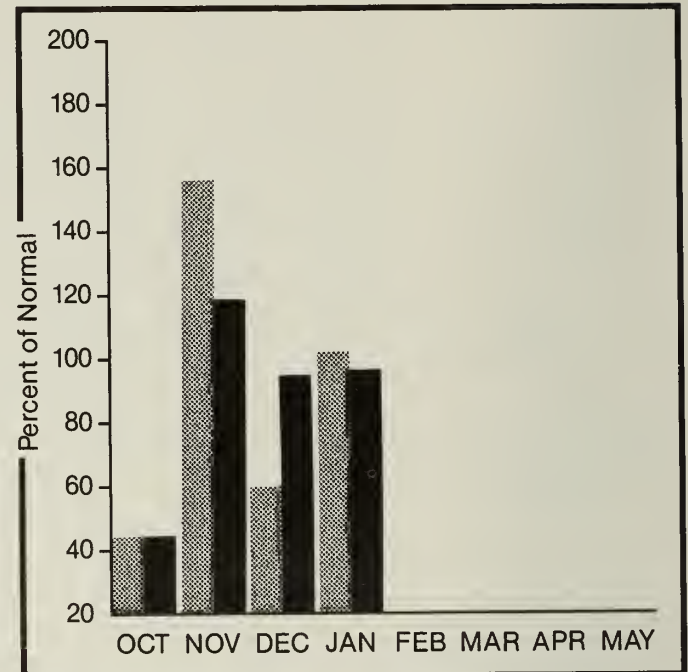
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Snowpack conditions in the basin show a good improvement from last month as a result of well above normal precipitation during the first half of January. Basin snowpacks are now near average on all watersheds, ranging from 95 to 100% of normal for this time of the year. Fourth of July Summit snow course reported 158% of normal snowpack indicating the low elevation areas near Coeur d'Alene have well above normal amounts of snow. Apr-Sept streamflow forecasts have been increased slightly and now range from 92 to 96% of normal. Reservoir storage remains low with Pend Oreille and Coeur d'Alene lakes reporting 54 and 53% of average storage, respectively. Priest Lake reports near normal storage at 97% of average.

UPPER COLUMBIA RIVER BASIN

STREAMFLOW FORECASTS

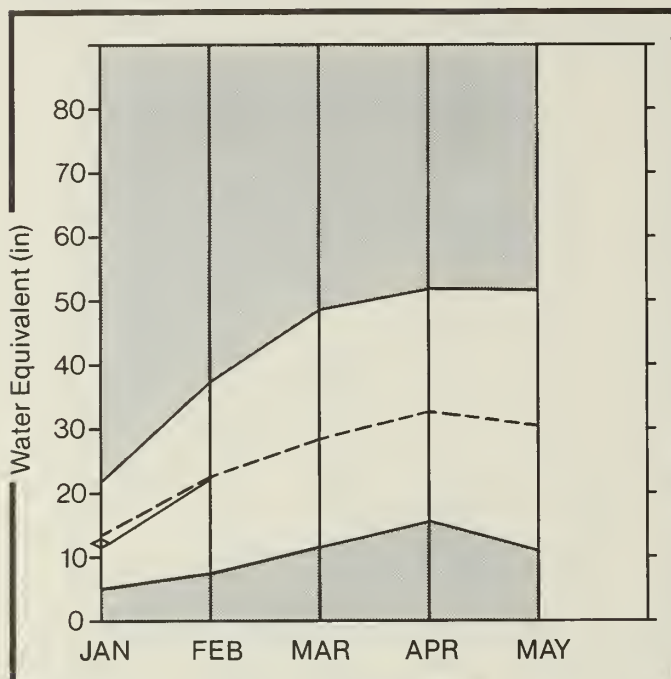
FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
KOOTENAI at Leona (2)	APR-SEP	8090	96			9950	6230	8441
	APR-JUL	7030	96			8640	5420	7340
	APR-JUN	5660	96			6960	4360	5899
CLARK FORK at Whitehorse Rapids (2)	APR-SEP	12400	93			16100	8660	13370
	APR-JUL	11300	93			14600	7900	12150
	APR-JUN	9630	93			12300	6730	10360
PEND OREILLE LAKE inflow (2)	APR-SEP	13800	92			18000	9620	14930
	APR-JUL	12700	93			16500	8740	13650
	APR-JUN	11000	93			14300	7580	11780
PRIEST nr Priest River (2)	APR-SEP	850	95			1140	555	893
	APR-JUL	795	95			1070	520	838
COEUR D'ALENE at Enaville	APR-SEP	785	95			1180	385	830
	APR-JUL	730	93			1120	360	789
SPOKANE nr Post Falls (2)	APR-SEP	2590	92	3130	2050	3750	1460	2820
	APR-JUL	2500	92	3020	1980	3620	1410	2723
ST. JOE at Calder	APR-SEP	1180	92	1400	975	1550	810	1281
	APR-JUL	1110	92	1330	915	1460	760	1211

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
HUNGRY HORSE	3451.0	1520.0	1887.0	2406.0	Kootenai ab Bonners Ferry	33	158	94
FLATHEAD LAKE	1791.0	782.6	840.2	1133.0	Pend Oreille River	112	156	96
PEND OREILLE	1561.2	440.6	529.9	823.1	Clark Fork River	77	145	92
NOXON RAPIDS	335.0	325.1	324.7	314.2	Priest River	5	139	100
COEUR D'ALENE	291.2	109.2	80.2	205.4	Rathdrum Creek	0	0	0
PRIEST LAKE	97.7	31.8	34.8	32.9	Hayden Lake	0	0	0
					Coeur d'Alene River	8	189	98
					St. Joe River	7	155	94
					Spokane River	15	169	96
					Palouse River	0	0	0

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.
 REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.
 (1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.
 (2) - Corrected for upstream diversions or changes in reservoir storage.

Clearwater River Basin

Mountain snowpack* (inches)



*Based on selected stations

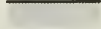
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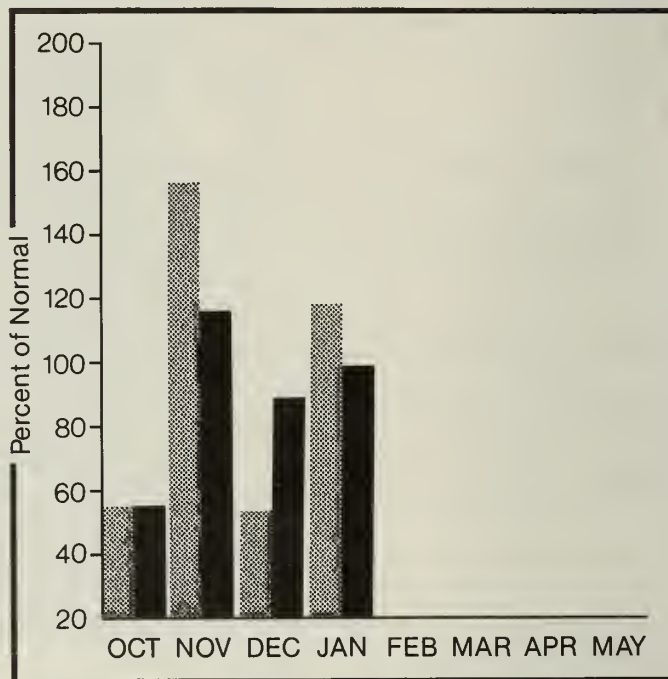
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Heavy precipitation during the first half of January brought improved snowpack conditions to the Clearwater drainage. Basin snowpack figures are now near normal, ranging from 94 to 100% of average for February 1. Several lower elevation stations in the Moscow, Boville, and Pierce areas reported well above normal amounts of snow, ranging from 133% of average at Pierce R.S. to 157% at the Sherwin Point station. Carryover storage in Dworshak Reservoir remains slightly below normal at 89% of average storage and 56% of capacity. Apr-Sept streamflow volumes are forecast to be near normal, ranging from 95 to 98% of average.

For more information contact your local Soil Conservation Service office.

CLEARWATER RIVER BASIN

STREAMFLOW FORECASTS

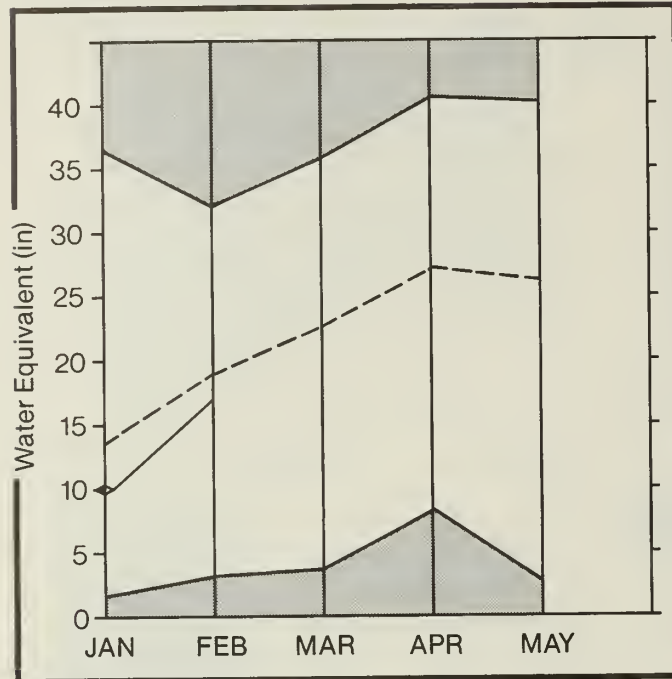
FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
OWORSHAK RESERVOIR inflow	APR-SEP	2940	98			4110	1710	3010
	APR-JUL	2730	97			3860	1600	2822
CLEARWATER at Orofino	APR-SEP	4900	95			6760	3040	5163
	APR-JUL	4650	95			6410	2890	4889
CLEARWATER at Spalding	APR-SEP	8030	96			11200	4850	8378
	APR-JUL	7600	96			10600	4590	7916

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
OWORSHAK	3467.8	1959.2	1854.8	2198.2	North Fork Clearwater	13	170	100
					Lochsa River	4	135	97
					Selway River	2	138	94
					Clearwater River	16	156	97

WET SUBS. and DRY SUBS. represent 170 and 70 percent subsequent precipitation events respectively.
 REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.
 (1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.
 (2) - Corrected for upstream diversions or changes in reservoir storage.

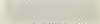
Salmon River Basin

Mountain snowpack* (inches)



*Based on selected stations

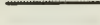
Maximum



Average



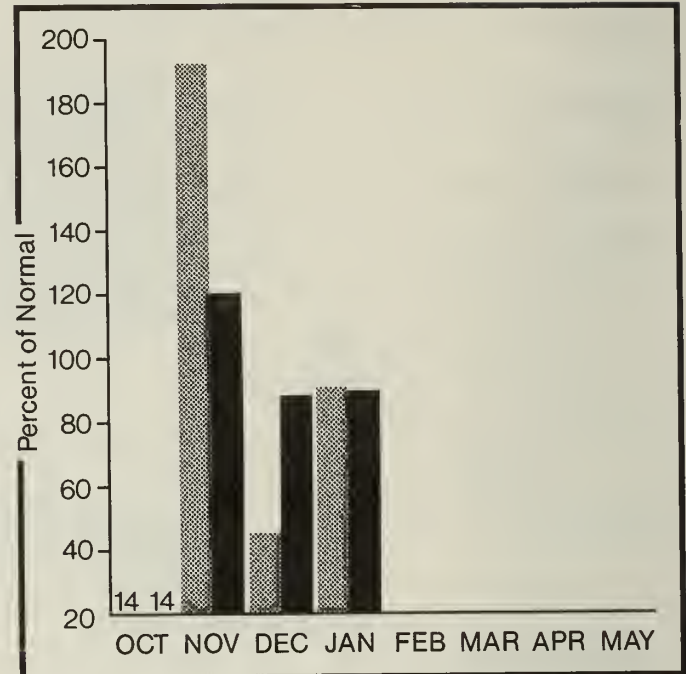
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

February 1 snow measurements show snowpack conditions over the basin improved somewhat during January, but remain slightly below normal. Currently, snowpacks range from 80% of normal on the Lemhi River to 95% in the lower Salmon River. Apr-Sept streamflow volumes are forecast to be just slightly below normal. Soil profiles remain dry and are expected to absorb more than normal amounts of water when the spring melt begins. However, near normal precipitation patterns for the remainder of the season should provide good flows for white water boating and other uses this spring and summer.

For more information contact your local Soil Conservation Service office.

SALMON RIVER BASIN

STREAMFLOW FORECASTS

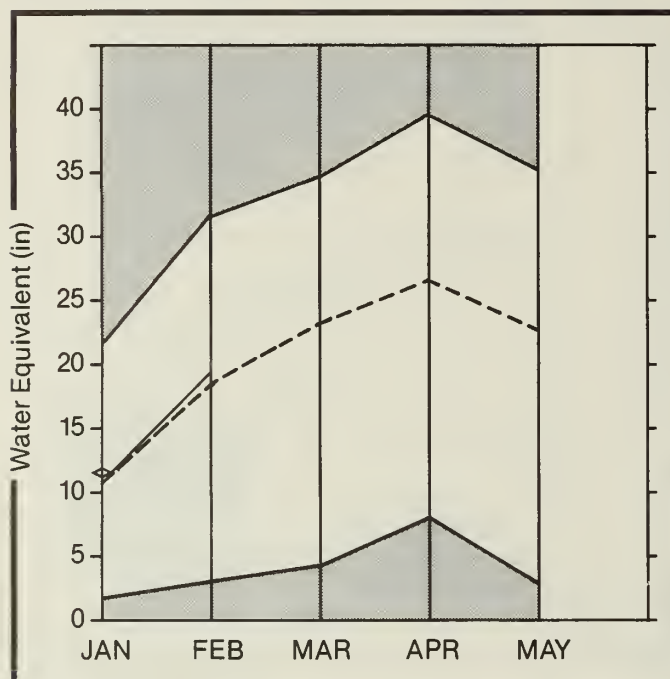
FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	FEAS. MAX. (1000AF)	FEAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
SALMON at Salmon	APR-SEP	1000	93			1430	570	1077
	APR-JUL	855	93			1220	485	919
SALMON at White Bird	APR-SEP	6450	92			8760	4140	7007
	APR-JUL	5820	92			7910	3730	6322

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	THIS YEAR	** USEABLE STORAGE ** LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
					Salmon River ab Salmon	7	134 88
					Lemhi River	1	154 80
					Salmon River Total	21	144 95

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.
 REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.
 (1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.
 (2) - Corrected for upstream diversions or changes in reservoir storage.

Weiser, Payette, and Boise River Basin

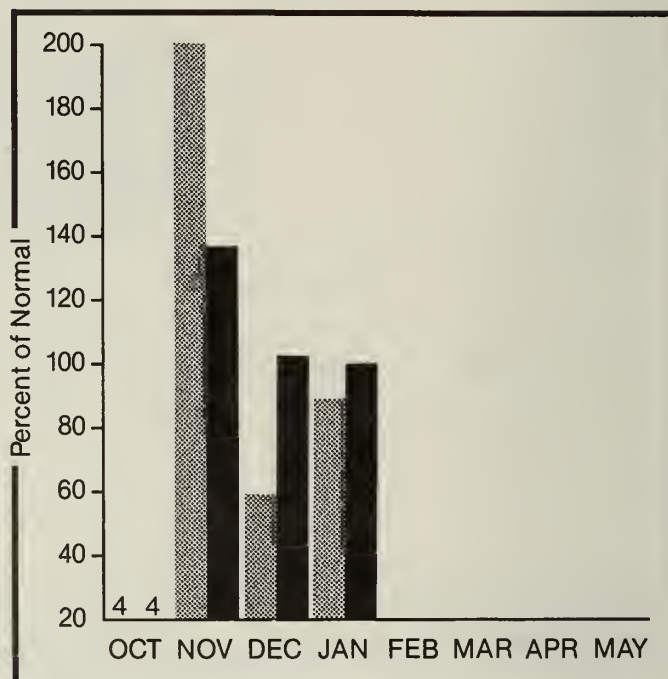
Mountain snowpack* (inches)



*Based on selected stations

Maximum ——— Average - - - - -
Minimum ——— Current ◊ ———

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation [hatched bar] Year to date precipitation [solid black bar]

WATER SUPPLY OUTLOOK:

February 1 snow measurements show that basin snowpacks remain near normal, with most basins reporting between 98 and 110% of average snowpacks. Higher elevation stations which were reporting slightly below average conditions on Jan. 1 have improved slightly and are now reporting near normal snowpacks. Apr-Sept streamflow volumes are expected to be near normal, with forecasts ranging from 95 to 100% of average. Reservoir storage is near average in Cascade Reservoir, but remains below to well below average in most other reservoirs. The Boise system now has a combined storage of 53% of average and 33% of capacity. Although storage levels are low, most systems are expected to fill or nearly fill provided normal precipitation and temperature patterns continue from now through the snowmelt runoff season.

WEISER, PAYETTE, AND BOISE RIVER BASIN

STREAMFLOW FORECASTS

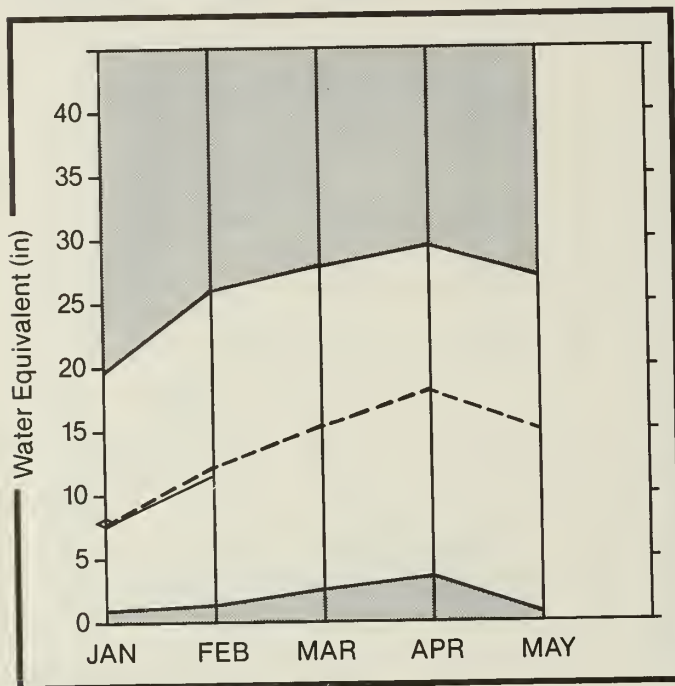
FORECAST POINT	FORECAST PERIOD	HIST PROBABLE (1000AF)	HIST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
WEISER nr Weiser	APR-SEP	430	97			680	177	444
	APR-JUL	400	97			630	164	414
NF PAYETTE at Cascade (2)	APR-SEP	540	95	575	505	660	420	568
	APR-JUL	505	95	530	480	615	395	531
NF PAYETTE nr Banks (2)	APR-SEP	700	95	820	595	885	515	737
	APR-JUL	660	96	770	555	835	485	691
PAYETTE nr Horseshoe Bend	APR-SEP	1790	96	1980	1600	2260	1320	1862
	APR-JUL	1650	96	1840	1460	2080	1220	1717
SF PAYETTE at Lowman	APR-SEP	490	95	545	435	620	360	516
	APR-JUL	435	95	490	380	550	320	458
DEADWOOD RESERVOIR inflow	APR-JUL	140	98			179	103	143
BOISE nr Twin Springs (1)	APR-SEP	705	98	800	610	885	530	722
	APR-JUL	650	98	750	550	810	490	664
BOISE nr Boise (1)	APR-SEP	1610	99	1890	1330	2110	1070	1628
	APR-JUL	1490	99	1750	1230	1970	1010	1508
	APR-JUN	1320	99	1550	1090	1750	895	1334
SF BOISE at Anderson Ranch Dam (1)	APR-SEP	620	100	720	520	745	495	619
	APR-JUL	580	100	665	495	690	465	578

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
		THIS YEAR	LAST YEAR	AVG.			
MANN CREEK	11.3	2.5	1.6	5.4	Mann Creek	1	181 105
CASCADE	703.2	403.2	362.7	409.4	Weiser River	4	154 98
DEADWOOD	162.0	58.6	64.6	79.5	North Fork Payette	10	152 102
ANDERSON RANCH	464.2	131.6	125.3	300.6	South Fork Payette	7	149 98
ARROWROCK	286.6	139.4	146.3	223.9	Payette River Total	16	150 99
LUCKY PEAK	307.0	62.4	81.0	117.4	Middle & North Fork Boise	9	158 103
LAKE LOWELL (DEER FLAT)	177.0	80.1	87.8	131.0	South Fork Boise River	7	165 105
					Boise River Total	16	165 110
					Canyon Creek	0	0 0

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.
 REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.
 (1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.
 (2) - Corrected for upstream diversions or changes in reservoir storage.

Big Wood, Little Wood, Big Lost, and Little Lost River Basin

Mountain snowpack* (inches)



*Based on selected stations

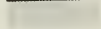
Maximum



Average



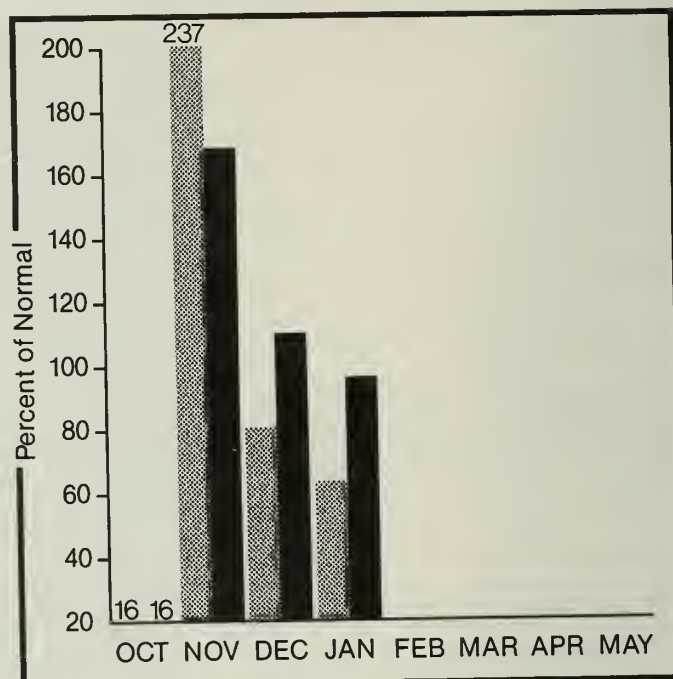
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

February 1 snowpack conditions show little or no change from those reported last month, remaining near normal in the higher elevations and above normal in the lower elevations. Basin snowpack conditions currently range from 93% of normal on the Big Lost River to 133% on the Fish Creek basin. Apr-Sept streamflow forecasts remain near normal, ranging from 90% of average on the Big Wood and Big Lost Rivers to 95% on the Little Lost below Wet Ck. Reservoir carryover storage remains low, ranging from only 22% of normal (11% of capacity) in Magic Reservoir to 69% of normal (46% of capacity) in Mackay Reservoir. Although storage levels are currently very low, most major reservoirs are expected to fill assuming normal precipitation and temperature patterns continue through the remainder of the season.

BIG WOOD, LITTLE WOOD, BIG LOST, AND LITTLE LOST RIVER BASIN

STREAMFLOW FORECASTS

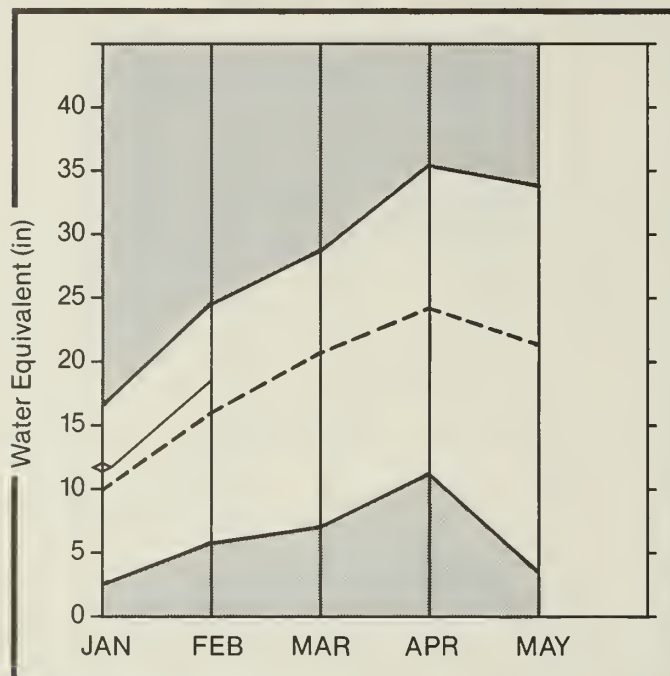
FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
BIG WOOD nr Bellevue	APR-SEP APR-JUL	195 180	90 89	235 220	158 144	250 230	139 130	217 202
MAGIC RESERVOIR inflow	APR-SEP APR-JUL	300 285	89 89	345 325	255 245	470 450	138 130	338 322
LITTLE WOOD nr Carey	APR-SEP APR-JUL	100 92	93 93	119 112	81 72	133 123	69 62	107 99
BIG LOST at Howell Ranch nr Chilly	APR-SEP APR-JUL APR-JUN	205 180 140	94 94 95	240 210 158	177 153 122	290 255 196	122 107 84	219 192 148
BIG LOST b1 Mackay Reservoir (2)	APR-SEP	176	90	210	151	245	108	195
LITTLE LOST b1 Wet Ck	APR-SEP APR-JUL	37 30	95 96	44 36	31 25	52 42	22 18.1	39 31
LITTLE LOST nr Howe	APR-SEP APR-JUL	41 31	93 94	46 35	37 28	57 43	25 18.8	44 33

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	USEABLE STORAGE THIS YEAR	USEABLE STORAGE LAST YEAR	USEABLE STORAGE AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	% OF AVERAGE
MAGIC	191.5	20.8	15.7	92.8	Big Wood ab Magic	10	152	94
LITTLE WOOD	30.0	9.8	11.4	15.5	Camas Creek	2	184	109
CAREY VALLEY		NO REPORT			Big Wood Total	11	158	96
MACKAY	44.5	20.6	24.2	30.0	Little Wood River	4	158	105
					Fish Creek	2	--	133
					Big Lost River	4	144	93
					Little Lost River	4	122	102

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.
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 (2) - Corrected for upstream diversions or changes in reservoir storage.

Willow Creek, Blackfoot, Upper Snake, and Portneuf River Basin

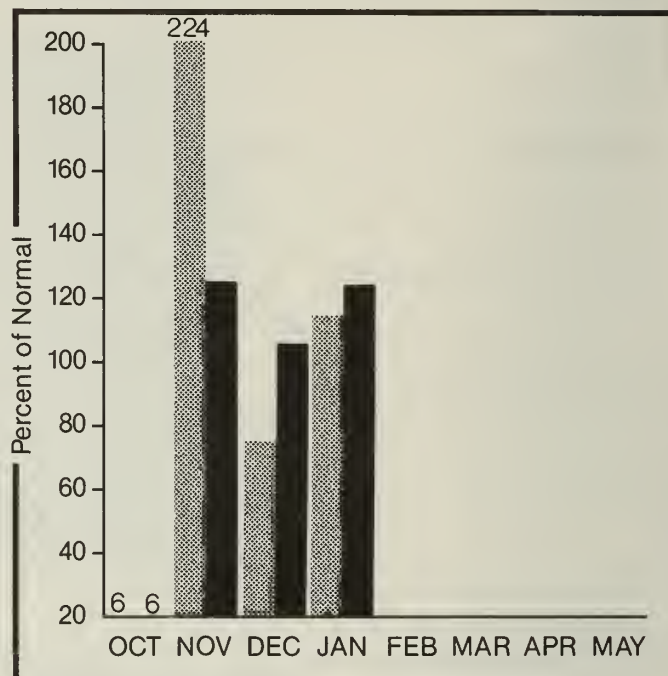
Mountain snowpack* (inches)



*Based on selected stations

Maximum ——— Average - - - - -
Minimum ——— Current ◇ ———

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation [hatched bar] Year to date precipitation [solid black bar]

WATER SUPPLY OUTLOOK:

February 1 snow surveys show snowpack conditions remain near to above normal throughout the basin. One exception is the Salt River basin which reports only 79% of average snowpack. Elsewhere, snowpacks range from 94% of average on the Greys River to 136% on the Beaver-Camas Creek drainage, with most basins reporting between 104 and 126% of normal snowpack. Apr-Sept streamflows are currently forecast to be near or above average, ranging from 103% on the Teton River to 113% on the Snake nr Moran. Reservoir storage remains below normal in most major reservoirs, ranging from 62% in Blackfoot to 85% in Ririe Reservoir. The exceptions are Jackson Lake which reports only 20% of average storage (17% of capacity) and Brownlee which reports near normal storage at 93% of average.

WILLOW CREEK, BLACKFOOT, UPPER SNAKE, AND FORTNEUF RIVER BASIN

STREAMFLOW FORECASTS

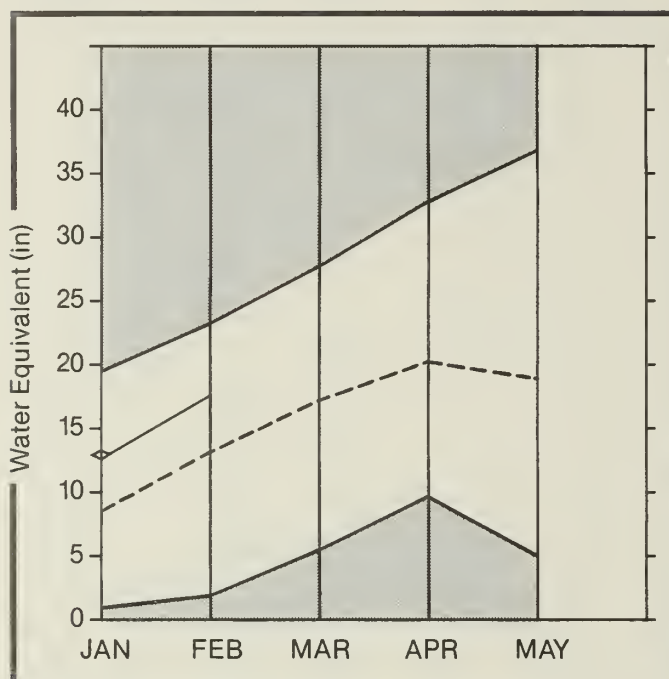
FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
HENRYS FORK nr Ashton (2)	APR-SEP	790	106	850	730	880	700	746
	APR-JUL	590	106	635	540	655	525	557
HENRYS FORK nr Rexburg (2)	APR-SEP	1670	105	1830	1510	2000	1340	1595
	APR-JUL	1320	105	1460	1180	1580	1060	1260
FALLS nr Squirrel	APR-JUL	390	105			470	315	373
TETON ab S Leigh Ck. nr Driggs	APR-SEP	200	103	230	175	225	173	194
	APR-JUL	152	105	177	129	172	132	145
TETON nr St. Anthony	APR-SEP	510	106	535	480	590	430	479
	APR-JUL	410	106	435	385	475	350	387
SNAKE nr Moran (1)	APR-SEP	1000	113	1090	910	1160	840	888
PALISADES RESERVOIR inflow (1)	APR-SEP	4010	104	4400	3620	5050	2970	3852
SNAKE nr Heise (2)	APR-SEP	4270	103	4850	3690	5430	3110	4142
	APR-JUL	3630	103	4160	3100	4620	2640	3524
SNAKE nr Blackfoot (2)	APR-SEP	5850	103	6650	5050	7160	4540	5680
	APR-JUL	4710	103	5400	4020	5770	3650	4589
PORTNEUF at Topaz	MAR-SEP	110	101	122	98	150	70	109
	MAR-JUL	88	100	99	77	121	56	88

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE THIS YEAR	** USEABLE STORAGE LAST YEAR	** STORAGE AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	% OF AVERAGE
ISLAND PARK	127.6	81.6	104.0	100.7	Camas-Beaver Creeks	4	201	136
GRASSY LAKE	15.2	8.7	8.9	10.7	Henrys Fork River	6	182	126
JACKSON LAKE	624.4	105.1	93.6	535.6	Teton River	9	148	116
PALISADES	1357.0	538.6	760.3	1016.0	SNAKE ab Palisades Res	31	140	104
AMERICAN FALLS	1700.0	893.9	1106.6	1141.5	SNAKE ab Jackson Lake	8	148	119
BROWNLEE	975.3	619.9	572.3	665.4	Gros Ventre River	3	143	100
BLACKFOOT	348.7	147.2	244.2	235.8	Greys River	5	123	94
HENRY'S LAKE	90.4	65.5	76.9	78.7	Salt River	5	128	79
RIRIE	96.5	41.0	47.4	48.5	Willow Creek	11	156	125
					Blackfoot River	7	150	108
					Portneuf River	9	145	106
					Toponce Creek	0	0	0

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.
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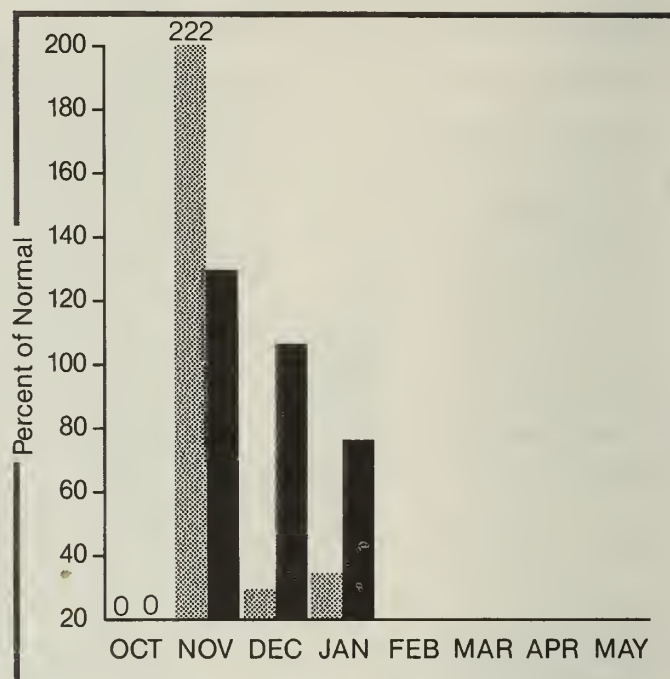
Southside Snake River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum ———
Minimum ———

Average - - - - -
Current ◊ ———

Monthly precipitation [hatched bar]

Year to date precipitation [solid black bar]

WATER SUPPLY OUTLOOK:

In comparison to normal, the February 1 snow measurements show a drop from those reported a month ago, but basin snowpacks remain above to well above average on all watersheds. Snowpacks currently range from 116% of normal on the Raft River to 171% on the Owyhee. Soil profiles remain dry and are expected to absorb above normal amounts of moisture when spring snowmelt begins. Mar-Sept and Apr-Sept streamflow forecasts have been decreased slightly, but remain above normal, ranging from 115% for Oakley Reservoir inflow to 121% for Owyhee Reservoir inflow. Carryover storage remains very low, ranging from only 18% of average in Owyhee Reservoir to 41% of average in Salmon Falls Creek Reservoir.

SOUTHSIDE SNAKE RIVER BASIN

STREAMFLOW FORECASTS

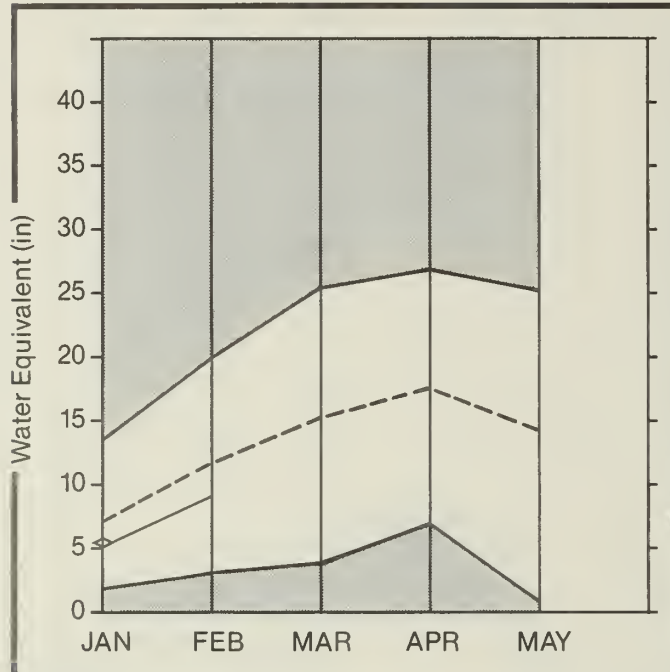
FORECAST POINT	FORECAST PERIOD	HIST PROBABLE (1000AF)	HIST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
OAKLEY RESERVOIR inflow	APR-SEP	38	115	43	33	50	26	33
	APR-JUL	34	114	40	30	45	23	30
SALMON FALLS CK nr San Jacinto	MAR-SEP	113	111	133	93	152	74	102
	MAR-JUL	108	111	123	88	145	71	97
	MAR-JUN	101	111	118	83	136	66	91
BRUNEAU nr Hot Spring	MAR-SEP	290	112	335	250	395	186	260
	MAR-JUL	275	111	320	230	375	178	248
OWYHEE nr Gold Ck (2)	MAR-JUL	37	112			55	17.5	33
OWYHEE nr Owyhee (2)	APR-JUL	90	105	122	58	144	36	86
OWYHEE nr Pome (2)	FEB-JUL	730	125	820	640	1020	435	586
OWYHEE RESERVOIR inflow (1)	APR-SEP	550	121	580	520	725	335	455
	FEB-JUL	800	120	875	725	1050	500	668

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
OAKLEY	77.4	10.2	9.5	26.5	Paft River	2	177 116
SALMON FALLS	182.6	20.1	35.8	49.3	Goose-Trapper Creeks	2	192 132
OWYHEE	715.0	81.1	187.5	443.9	Salmon Falls Creek	9	148 129
					Bruneau River	9	165 138
					Owyhee River	23	215 171

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.
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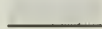
Great Basin

Mountain snowpack* (inches)



*Based on selected stations

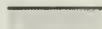
Maximum



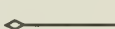
Average



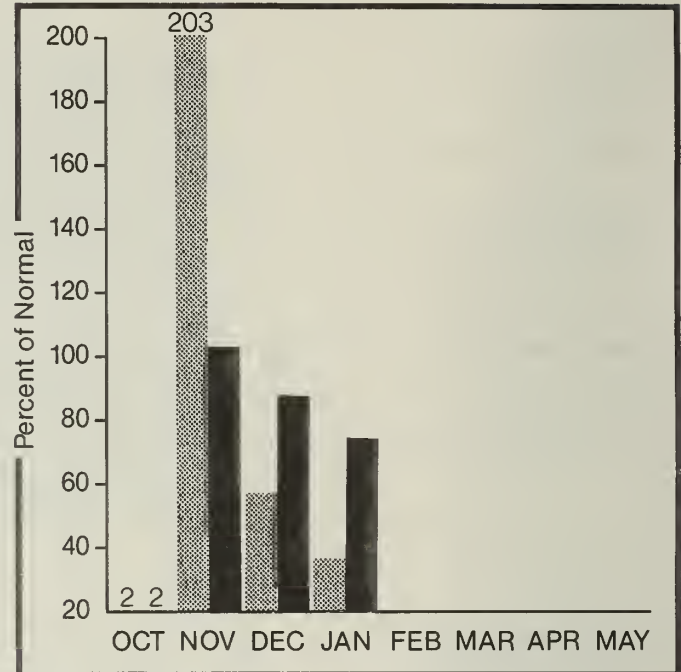
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Snow measurements taken near the first of February show snowpack conditions remain generally below normal throughout the basin, ranging from 83% of average on the Cub River and Montpelier Creek drainages to 93% on the Mink Creek drainage. The exception is the Malad River basin which reports 110% of average snowpack. Mountain soil profiles remain dry and are expected to absorb above normal amounts of moisture when the spring snowmelt begins. Normal or above normal precipitation will be needed over the remainder of the winter and spring season to produce normal runoff volumes for the upcoming irrigation season. Apr-Sept streamflow volumes are currently forecast to be slightly below normal, ranging from 79% to 85% of average. Carryover storage also remains below normal with Bear Lake reporting 81% of average storage and Montpelier Creek Reservoir only 35% of average.

GREAT BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
BEAR RIVER near Harer	APR-SEP	245	79	290	195	390	102	310
MONTPELIER CK nr Montpelier	APR-SEP	11.5	83	13.3	9.7	17.1	5.9	13.9
CUB RIVER near Preston	APR-SEP	44	85	54	34			52
	APR-JUL	40	85	49	31	55	25	47

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE	
		THIS YEAR	LAST YEAR	AVG.				
BEAR LAKE	1421.0	802.9	1013.4	987.6	Bear River (above Harer)	11	120	86
MONTPELIER CREEK	4.0	0.6	1.2	1.7	Montpelier Creek	7	110	83
					Mink Creek	5	147	93
					Cub River	3	121	83
					Malad River	1	140	110

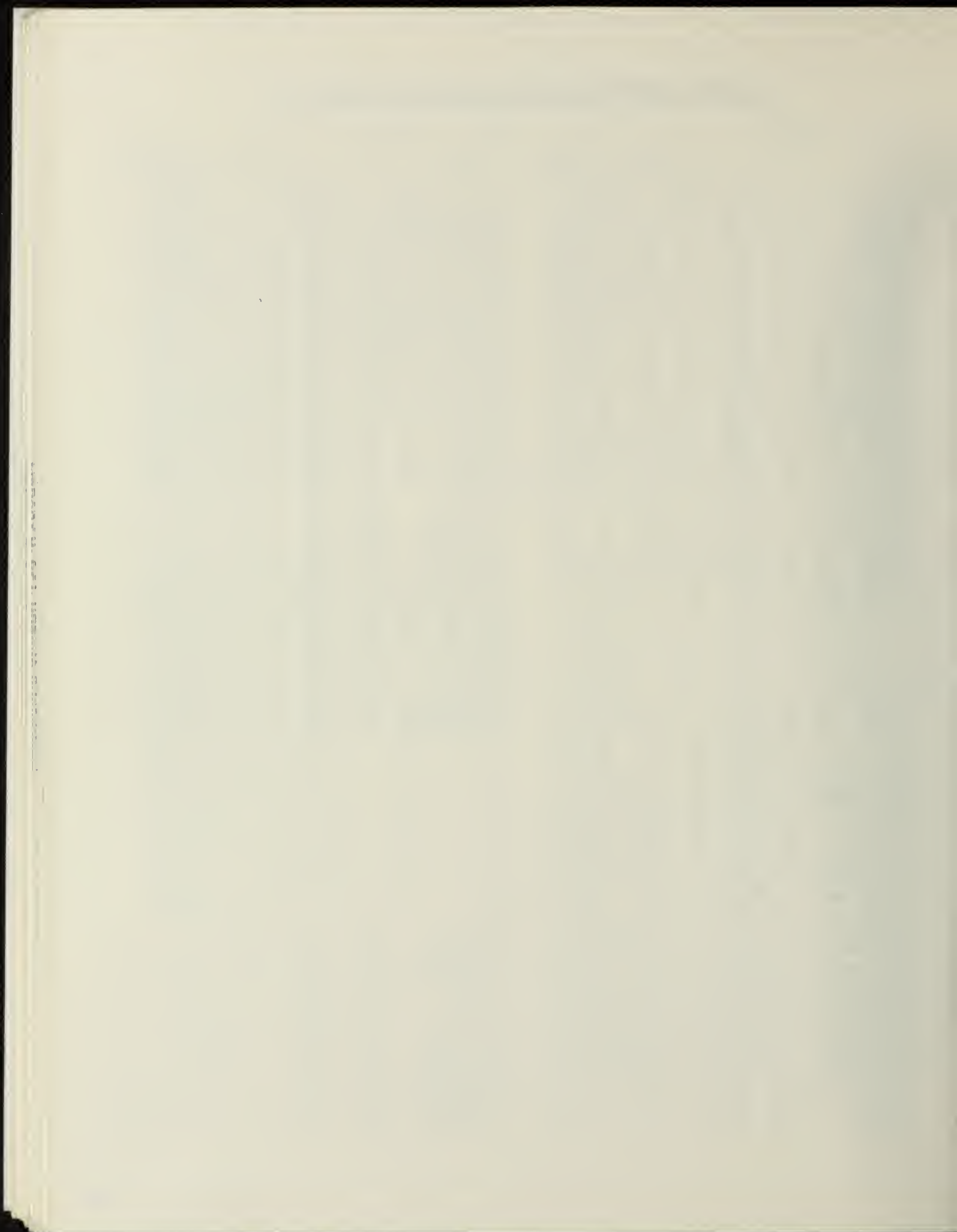
WET SUBS. and DRY SUBS. represent 150 and 50 percent subsequent precipitation events respectively.
 REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.
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 (2) - Corrected for upstream diversions or changes in reservoir storage.

SNOW DATA MEASUREMENTS

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
UPPER COLUMBIA BASIN							CLEARWATER BASIN						
WATERSHED I							WATERSHED II						
ABOVE BURKE	4100	2/06/89	---	14.3E	6.7	14.2	BREEZY SADDLE	5010	1/26/89	67	19.6	13.7	20.6
ABOVE ROLAND	4350	2/06/89	---	18.2E	10.8	20.8	CAYOSE AIRSTRIP	3500	1/26/89	37	9.7	6.4	8.8
BEAR MOUNTAIN	5400	1/30/89	---	37.2E	24.3	41.5	COOL CREEK	6250	1/26/89	116	35.5	21.4	36.6
BEAR MTN PILLOW	5400	2/01/89	---	36.5	24.3	42.6	COOL CREEK PILLOW	6280	2/01/89	---	33.6	20.5	34.4
BENTON MEADOW	2370	1/31/89	16	5.0	2.4	5.1	CRATER MEADOWS	5960	1/26/89	96	29.1	17.2	30.2
BENTON SPRING	4920	1/31/89	46	15.7	8.2	13.2	CRATER MUNS PILLOW	5960	2/01/89	---	31.2	18.5	31.6
BREEZY SADDLE	5010	1/26/89	67	19.6	13.7	20.6	CROOKED FORK	3610	1/30/89	43	12.4	8.0	9.9
COPPER RIDGE	4820	1/30/89	---	15.7E	---	18.3	ELK BUTTE	5550	1/26/89	---	26.2E	14.4	25.5
FORTY-NINE MEADOWS	4830	1/30/89	---	19.2E	12.7	20.3	ELK BUTTE PILLOW	5550	2/01/89	---	30.1	15.7	28.7
FOURTH OF JULY SUM	3200	1/31/89	33	11.2	5.4	7.1	FISH LAKE AIRSTRIP	5650	1/26/89	88	26.4	19.1	27.0
HUMBOLDT GULCH	4250	2/06/89	37	10.8	5.4	10.7	FORTY-NINE MEADOWS	4830	1/30/89	---	19.2E	12.7	20.3
HUMBOLDT GLCH PILLOW	4250	2/01/89	---	9.9	5.1	9.7	HEMLOCK BUTTE	5810	1/26/89	111	33.3	16.4	34.0
KELLOGG PEAK AM	5560	2/06/89	---	19.4E	12.2	22.4	HEMLOCK BUTTE PILLOW	5810	2/01/89	---	35.2	18.7	33.3
LOOKOUT	5140	2/06/89	61	19.8	12.6	23.6	HOOBOD BASIN	6050	1/28/89	96	31.1	23.5	34.6
LOOKOUT PILLOW	5140	2/01/89	---	19.0	13.1	23.0	HOOBOD CREEK	5900	1/28/89	89	27.6	19.4	31.7
LOST LAKE	6110	1/26/89	106	35.2	21.0	39.1	LOLO PASS	5240	2/02/89	60	16.5	13.2	20.6
LOST LAKE PILLOW	6110	2/01/89	---	39.0	22.3	44.4	LOLO PASS PILLOW	5240	2/01/89	---	19.4	14.3	22.2
LOWER SANDS CREEK	3120	2/06/89	---	15.4E	6.2	12.3	LOST LAKE	6110	1/26/89	106	35.2	21.0	39.1
MOSQUITO RIDGE	5200	1/31/89	77	26.0	16.2	26.2	LOST LAKE PILLOW	6110	2/01/89	---	39.0	22.3	44.4
MUSQUITO PILLOW	5200	2/01/89	---	26.0	16.2	26.3	MOUNTAIN MEADOWS	6360	1/30/89	---	13.7E	9.9	15.8
ROLAND SUMMIT	5120	2/06/89	---	22.7E	---	25.9	MOUNTAIN MDWS PILLOW	6360	2/01/89	---	15.6	11.3	18.3
SCHWEITZER BASIN	6090	1/30/89	90	33.6	25.0	33.0	PIERCE R.S.	3080	2/01/89	40	10.8	5.6	8.1
SCHWEITZER BN PILLOW	6090	2/01/89	---	34.5	29.4	34.6	SAVAGE PASS	6170	1/30/89	56	17.8	14.0	17.7
SCHWEITZER BOWL	4800	1/30/89	59	20.4	16.3	21.4	SAVAGE PASS PILLOW	6170	2/01/89	---	18.5	13.6	18.3
SCHWEITZER RIDGE	6200	1/30/89	83	30.5	23.6	32.2	SHANGHAI SUMMIT	4570	1/26/89	87	24.9	9.2	17.8
SHERWIN	3200	1/30/89	---	15.4E	6.4	9.8	SHANGHAI SUM PILLOW	4570	2/01/89	---	25.7	10.0	19.0
SHERWIN PILLOW	3200	2/01/89	---	13.8	6.0	9.5	SHERWIN	3200	1/30/89	---	15.4E	6.4	9.8
SUNSET	5540	1/30/89	60	19.7	7.4	22.8	SHERWIN PILLOW	3200	2/01/89	---	13.8	6.0	9.5
SUNSET PILLOW	5540	2/01/89	---	22.8	10.8	24.3							
SALMON BASIN							WEISER, PAYETTE, AND BOISE BASINS						
WATERSHED III							WATERSHED IV						
BANNER SUMMIT	7040	1/30/89	---	20.2E	14.4	21.7	ATLANTA SUMMIT	7600	1/28/89	76	23.9	15.5	24.2
BANNER SUMMIT PILLOW	7040	2/01/89	---	16.6	13.0	19.4	ATLANTA SUM PILLOW	7580	2/01/89	---	21.4	15.5	21.6
BEAR BASIN	5350	1/30/89	---	15.3E	6.9	13.5	ATLANTA TOWNSITE	5370	1/28/89	35	9.0	5.5	---
BEAR BASIN PILLOW	5350	2/01/89	---	16.1	6.5	13.4	BANNER SUMMIT	7040	1/30/89	---	20.2E	14.4	21.7
BIG CREEK SUMMIT	6580	1/30/89	---	25.7E	17.5	25.4	BANNER SUMMIT PILLOW	7040	2/01/89	---	16.6	13.0	19.4
BIG CREEK SUM PILLOW	6580	2/01/89	---	22.5	15.5	22.0	BEAR BASIN	5350	1/30/89	---	15.3E	6.9	10.5
BOULDER CREEK	5440	1/30/89	---	16.5E	9.6	16.6	BEAR BASIN PILLOW	5350	2/01/89	---	16.1	6.5	13.4
BRONDAKE MOUNTAIN	7560	1/30/89	---	28.8E	22.2	30.8	BEAR SADDLE	6180	2/02/89	72	22.6	12.5	21.6
BRUNO CREEK	7920	2/02/89	44	11.9	11.0	13.7	BEAR SADDLE PILLOW	6180	2/01/89	---	21.1	12.6	21.8
DEADWOOD SUMMIT	6860	1/27/89	89	27.5	21.2	32.2	BIG CREEK SUMMIT	6580	1/30/89	---	25.7E	17.5	25.4
GALENA SUMMIT	8780	1/30/89	46	14.0	8.8	16.4	BIG CREEK SUM PILLOW	6580	2/01/89	---	22.5	15.5	22.0
GALENA SUMMIT PILLOW	8780	2/01/89	---	12.1	9.5	13.2	BOGUS BASIN	6340	2/01/89	63	20.2	11.2	16.7
GIBBONS PASS	7100	1/31/89	54	16.4	10.7	16.0	BOGUS BASIN ROAD	5540	2/01/89	31	9.9	5.9	5.9
MEADOW LAKE	9150	1/30/89	---	10.5E	6.8	13.1	BOULDER CREEK	5440	1/30/89	---	16.5E	9.6	16.6
MEADOW LAKE PILLOW	9150	2/01/89	---	10.5	5.2	13.4	BRUNOAGE MOUNTAIN	7560	1/30/89	---	28.8E	22.2	30.8
MILL CREEK SUMMIT	8800	1/30/89	---	12.1E	10.0	16.0	BRUNOAGE RESV PILLOW	4500	2/01/89	---	18.5	11.9	---
MILL CREEK ST PILLOW	8800	2/01/89	---	12.1	9.6	15.0	COUCH SUMMIT	6840	1/28/89	---	13.8E	7.6	13.2
MOONSHINE	7440	1/26/89	34	7.3	5.9	7.3	COZY COVE	5380	1/27/89	39	10.3	6.6	11.9
MOONSHINE PILLOW	7440	2/01/89	---	7.8	5.8	7.5	COZY COVE PILLOW	5380	2/01/89	---	10.3	---	---
MOOSE CREEK	6200	1/31/89	45	13.9	9.2	12.1	CRAWFORD R.S.	4860	1/26/89	32	8.6	4.0	6.3
MOOSE CR PILLOW	6200	2/01/89	---	12.6	9.1	12.2	DEADMAN GULCH	5600	1/30/89	58	17.0	10.3	12.5
MORGAN CREEK	7600	1/30/89	---	7.3E	7.0	9.6	DEADWOOD AIRSTRIP	5360	1/30/89	---	10.5E	8.7	11.2
MORGAN CREEK PILLOW	7600	2/01/89	---	6.8	6.8	9.2	DEADWOOD SUMMIT	6860	1/27/89	89	27.5	21.2	32.2
ROCK FLAT SUMMIT	5310	1/30/89	---	15.2E	7.5	12.6	DOLLARHIDE SUMMIT	8420	1/28/89	56	17.4	10.5	17.2
SADDLE MOUNTAIN	7940	1/31/89	59	18.5	11.4	17.6	DOLLARHIDE SM PILLOW	8420	2/01/89	---	17.9	11.0	17.5
SECESH SUMMIT	6520	1/26/89	73	22.3	17.3	25.1	GRAHAM GUARD STATION	5690	1/27/89	42	11.1	7.9	11.6
SECESH SUMMIT PILLOW	6520	2/01/89	---	20.6	17.4	25.4	GRAHAM G.S. PILLOW	5690	2/01/89	---	10.7	6.4	12.2
SQUAW MEADOW	5900	1/26/89	74	22.6	16.5	24.3	IDAHO CITY TOWNSITE	4000	2/01/89	24	6.9	4.5	4.3
VIENNA MINE	8960	1/27/89	78	24.2	15.5	25.1	JACKSON PEAK	7070	1/27/89	66	20.2	12.2	22.4
VIENNA MINE PILLOW	8960	2/01/89	---	20.6	16.3	25.1	LAKE FORK	5290	1/26/89	48	12.9	6.5	11.8
WEBB CREEK	4720	1/27/89	35	8.4	3.6	7.5	MOORES CREEK SUMMIT	6100	2/01/89	73	25.6	16.3	22.6
WEST BRANCH	5560	1/27/89	58	18.2	11.8	18.2	MOORES CK SUM PILLOW	6100	2/01/89	---	24.6	15.8	22.9
WEST BRANCH PILLOW	5560	2/01/89	---	16.9	11.7	18.1	PRAIRIE	4800	1/28/89	34	8.6	3.5	4.9
							PRAIRIE PILLOW	4800	2/01/89	---	5.8	3.5	---
							ROAD CREEK	5380	1/28/89	32	8.3	4.5	7.4
							ROCK FLAT SUMMIT	5310	1/30/89	---	15.2E	7.5	12.6
							SECESH SUMMIT	6520	1/26/89	73	22.3	17.3	25.1
							SECESH SUMMIT PILLOW	6520	2/01/89	---	20.6	17.4	25.4
							SOLDIER R.S.	5740	1/28/89	41	11.0	5.9	9.5
							SOLDIER R.S. PILLOW	4330	2/01/89	---	11.8	6.1	---
							SQUAW FLAT	6240	1/30/89	---	15.9E	13.5	18.4
							SQUAW FLAT PILLOW	6240	2/01/89	---	14.2	12.0	16.2
							SQUAW MEADOW	5900	1/26/89	74	22.6	16.5	24.3
							TRINITY MOUNTAIN	7770	1/28/89	86	30.1	19.5	29.3
							TRINITY MTN. PILLOW	7770	2/01/89	---	28.4	19.9	28.3
							TRIPOD SUMMIT	5260	1/25/89	60	17.2	9.2	12.9
							VIENNA MINE	8960	1/27/89	78	24.2	15.5	25.1
							VIENNA MINE PILLOW	8960	2/01/89	---	20.6	16.3	25.1
							WEST BRANCH	5560	1/27/89	58	18.2	11.8	18.2
							WEST BRANCH PILLOW	5560	2/01/89	---	16.9	11.7	18.1

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
BIG WOOD, LITTLE WOOD, BIG LOST, AND LITTLE LOST BASINS							WILLOW, BLACKFOOT, UPPER SNAKE, AND PORTNEUF BASINS						
WATERSHED VI							WATERSHED VI						
BEAR CANYON	7900	1/30/89	---	11.8E	9.4	12.4	ASPEN GROVE	6500	1/31/89	---	9.9E	7.8	8.9
BEAR CANYON PILLOW	7900	2/01/89	---	9.9	8.5	11.4	AUSTIN BROTHERS RNCH	6400	1/30/89	---	6.7E	4.9	6.6
COPPER BASIN	7640	1/30/89	---	5.1E	2.7	6.3	BEAVERDAM CREEK	6120	1/28/89	26	6.4	4.7	6.5
COUCH SUMMIT	6840	1/28/89	---	13.8E	7.6	13.2	BIG SPRINGS	6400	2/01/89	55	17.1	8.9	14.0
DOLLARHIDE SUMMIT	8420	1/28/89	56	17.4	10.5	17.2	BIRCH CREEK	6800	1/31/89	31	9.1	5.4	7.7
DOLLARHIDE SM PILLOW	8420	2/01/89	---	17.9	11.0	17.5	BLUE LEDGE MINE	6900	1/30/89	---	16.3E	8.4	11.8
GALENA	7440	1/30/89	---	12.0E	7.8	13.7	BLUE RIDGE	6780	1/31/89	51	16.4	10.1	13.6
GALENA PILLOW	7440	2/01/89	---	11.5	8.0	13.5	BONN	6200	1/31/89	28	7.7	4.4	5.6
GALENA NEW	7470	1/30/89	46	12.8	8.3	15.2	BROCKMAN STATION	6430	1/31/89	34	9.9	6.5	6.8
GALENA SUMMIT	8780	1/30/89	46	14.0	8.8	16.4	CAMP CREEK	6580	1/30/89	36	9.6	4.0	7.2
GALENA SUMMIT PILLOW	8780	2/01/89	---	12.1	9.5	13.2	COULTER CREEK PILLOW	7020	1/30/89	58	17.1	11.6	15.9
GARFIELD R.S.	6560	1/31/89	32	8.5	4.4	7.4	CRAB CREEK	6860	1/30/89	---	15.2E	7.4	10.8
GARFIELD R.S. PILLOW	6560	2/01/89	---	8.2	4.8	7.3	CRAB CREEK PILLOW	6860	2/01/89	---	15.7	7.8	11.4
GRAHAM RANCH	6270	1/30/89	41	10.7	4.8	10.0	EAST CREEK	7000	1/29/89	34	8.3	7.1	7.7
HILTS CREEK	8000	1/27/89	35	7.8	7.0	7.7	FALL CREEK	6820	1/31/89	30	8.8	4.7	6.8
HILTS CREEK PILLOW	8000	2/01/89	---	9.0	8.9	8.9	GRASSY LAKE	7270	1/30/89	80	28.4	18.8	24.0
HYNDMAN CREEK	7440	1/30/89	---	10.3E	7.8	10.0	GRASSY LAKE PILLOW	7270	2/01/89	---	24.6	15.7	24.8
HYNDMAN PILLOW	7440	2/01/89	---	9.0	7.1	8.7	INDIAN MEADOWS	9420	1/31/89	81	27.9	21.1	24.8
IRON MINE CREEK	6300	1/31/89	35	9.6	---	8.0	ISLAND PARK	6290	2/06/89	52	15.6	8.1	11.6
LOST-WOOD DIVIDE	7900	1/30/89	---	15.1E	11.0	16.0	ISLAND PARK PILLOW	6290	2/01/89	---	15.1	9.2	11.5
LOST-WOOD DVD PILLOW	7900	2/01/89	---	15.8	11.2	16.1	JACKPINE CREEK	7350	1/31/89	52	16.4	12.5	15.2
MASCOT MINE	7780	1/30/89	---	9.6E	8.4	10.6	KILGORE	6320	1/30/89	37	10.5	5.9	8.2
MOONSHINE	7440	1/26/89	34	7.3	5.9	7.3	LAVA CREEK	7350	1/31/89	44	12.2	8.7	10.1
MOONSHINE PILLOW	7440	2/01/89	---	7.8	5.8	7.5	LOWER PEBBLE	5780	1/28/89	38	11.3	8.1	9.3
MOUNT BALDY	8920	1/30/89	48	13.6	9.2	14.5	MC RENOLDUS RESERVOIR	6720	1/31/89	48	13.5	9.1	13.1
MULDOON	6320	1/31/89	22	5.8	3.1	5.6	MINK CREEK	6410	1/29/89	47	12.4	8.5	12.4
SAMMILL CANYON	7000	1/26/89	27	5.9	4.0	5.7	MUD CREEK	7100	1/31/89	58	17.9	10.8	13.3
SOLDIER R.S.	5740	1/28/89	41	11.0	5.9	9.5	NORTH PUTNAM	7240	1/31/89	57	19.0	12.3	20.5
SOLDIER R.S. PILLOW	4330	2/01/89	---	11.8	6.1	---	PEBBLE CREEK	6550	1/29/89	41	11.7	7.9	11.5
STICKNEY MILL	7430	1/30/89	---	5.8E	3.2	6.0	PHILLIPS BENCH	8200	1/27/89	77	22.9	14.8	21.2
STICKNEY MILL PILLOW	7430	2/01/89	---	5.1	2.8	5.4	PHILLIPS BENCH PILL.	8200	2/01/89	---	22.1	---	19.4
SWEDE PEAK	7640	1/31/89	45	13.0	7.8	11.9	PINE CREEK PASS	6810	1/31/89	44	13.5	9.9	11.6
SWEDE PEAK PILLOW	7640	2/01/89	---	12.5	7.2	10.2	SAWTELL MOUNTAIN	8720	2/06/89	86	30.2	16.7	23.0
TELFER RANCH	5840	1/31/89	33	9.1	---	6.1	SEDCWICK PEAK	7850	1/29/89	42	11.8	9.2	12.8
VIENNA MINE	8960	1/27/89	78	24.2	15.5	25.1	SHEEP MOUNTAIN	6570	1/31/89	36	10.5	7.4	9.2
VIENNA MINE PILLOW	8960	2/01/89	---	20.6	16.3	25.1	SHEEP MTN PILLOW	6570	2/01/89	---	13.1	8.1	10.1
WET CREEK SUMMIT	7680	1/27/89	34	8.2	7.1	7.8	SLUG CREEK DIVIDE	7230	1/31/89	31	9.5	7.5	11.3
SOUTHSIDE SNAKE BASIN							SLUG CK DVD PILLOW	7230	2/01/89	---	8.9	8.7	12.9
WATERSHED VII							SOMSEN RANCH	6840	1/30/89	39	11.6	7.7	10.1
ANTELOPE RIDGE	6180	1/30/89	---	10.9E	3.0	---	SOMSEN RANCH PILLOW	6800	2/01/89	---	8.9	7.0	9.3
BADGER GULCH	6660	1/30/89	---	11.4E	6.7	8.1	STATF LINE	6660	1/31/89	42	12.4	8.0	9.9
BATTLE CREEK AM	5720	1/27/89	33	10.9	2.2	2.9	TARGHEE PASS	6980	2/06/89	---	12.6E	---	10.1
BEAR CREEK	7800	1/30/89	---	17.1E	10.4	13.5	TETON PASS W.S.	7740	1/27/89	69	22.5	12.9	17.5
BEAR CK SNOTEL	7800	2/01/89	---	16.9	10.0	13.0	TEX CREEK	6650	1/30/89	---	8.7E	5.1	6.2
BIG BEND	6700	1/31/89	31	8.4	5.4	6.2	TWITCHELL CANYON	6300	1/31/89	48	16.2	9.8	11.0
BOSTETTER R.S.	7500	1/30/89	---	18.0E	8.6	14.2	VALLEY VIEW	6680	2/06/89	47	14.0	5.8	11.4
BOSTETTER RS PILLOW	7500	2/01/89	---	16.2	7.5	12.4	WHITE ELEPHANT	7710	2/06/89	66	22.3	12.0	17.0
BULL BASIN AM	5460	1/27/89	18	5.6	1.8	1.4	WHITE ELEPHANT PILL	7710	2/01/89	---	24.8	14.6	18.1
CLEAR CREEK MEADOWS	9420	1/30/89	---	16.6E	9.3	15.2	WILDHORSE DIVIDE	6490	1/29/89	42	12.5	8.0	11.7
COLUMBIA BASIN AM	6650	1/30/89	32	9.1	---	6.5	WILDHORSE DVD PILLOW	6490	2/01/89	---	13.1	7.8	10.7
DEADLINE	7400	1/27/89	34	11.0	7.8	15.5	WOOD CANYON DIVIDE	7450	1/30/89	29	7.6	---	---
DEADLINE SOUTH	7450	1/27/89	45	15.7	11.7	16.9	GREAT BASIN						
GOAT CREEK	8800	1/30/89	---	14.4E	9.8	11.7	CDR RIVER R.S.	5450	1/30/89	---	6.1E	5.2	6.6
GOLD CREEK	6600	1/31/89	23	6.3	3.7	3.9	DRY CREEK FLAT	6360	1/26/89	17	3.2	---	---
HOWELL CANYON	7980	1/30/89	---	22.2E	12.6	18.2	EMIGRANT SUMMIT	7390	1/30/89	47	14.0	11.2	16.9
HOWELL CANYON PILLOW	7980	2/01/89	---	18.5	10.6	15.3	EMIGRANT SUM PILLOW	7390	2/01/89	---	12.5	10.8	19.3
HUMMINGBIRD SPRINGS	8950	1/30/89	---	20.3E	13.8	15.5	EMIGRATION CANYON	6500	1/30/89	28	7.6	5.1	7.6
HYDE PASTURE AM	5760	1/27/89	40	13.6	2.2	4.7	FRANKLIN BASIN	8020	1/30/89	---	13.3E	10.3	16.6
JACK CREEK, LOWER	6800	1/30/89	18	4.5	4.6	2.6	GIVEOUT	6860	1/31/89	29	7.6	6.6	8.5
JACKS PEAK	8420	2/01/89	---	20.3E	9.4	14.4	GIVEOUT PILLOW	6840	2/01/89	---	6.7	8.0	8.9
LANGFORD FLAT CREEK	5980	1/27/89	27	7.1	5.1	5.1	GIVEOUT NEW	6930	1/31/89	26	6.6	7.1	7.6
LAUREL DRAW	6700	2/01/89	---	8.2E	5.3	5.8	LIBERTY SPRING	8600	1/30/89	---	21.3E	13.8	24.2
LOUSE CANYON AM	6440	1/27/89	33	11.6	3.4	4.1	LITTLE BEAVER	6790	1/30/89	---	8.2E	9.0	10.5
MAGIC MOUNTAIN	6880	1/27/89	51	16.1	9.9	13.1	LOWER HOME CANYON	7640	1/31/89	---	8.0E	6.7	9.7
MAGIC MTN PILLOW	6880	2/01/89	---	16.7	9.8	13.1	MONTPELIER CREEK	6540	1/30/89	---	4.5E	5.0	5.7
MERRIT MOUNTAIN AM	7000	1/30/89	33	8.9	---	5.0	OXFORD MOUNTAIN	6800	1/30/89	---	8.0E	6.4	---
MUD FLAT	5730	1/30/89	---	8.0E	3.8	4.8	OXFORD SPRING	6740	1/30/89	---	8.7E	6.2	7.9
MUD FLAT PILLOW	5730	2/01/89	---	8.2	---	4.3	OXFORD SPRING PILLOW	6740	2/01/89	---	9.4	6.2	8.9
OREGON CANYON AM	6950	1/27/89	27	9.2	3.4	4.3	STRAWBERRY CREEK	5820	1/30/89	36	10.2	6.1	7.5
POLE CREEK R.S.	8330	1/30/89	---	17.4E	11.8	13.0	STRAWBERRY-MINK DVD	6720	1/30/89	---	12.6E	8.4	14.8
QUINN RIDGE AM	6300	1/27/89	21	6.5	4.2	1.5	UPPER HOME CANYON	8560	1/31/89	44	13.2	10.6	15.8
RED CANYON AM	6650	1/27/89	30	9.6	4.1	5.5	WILLOW FLAT	6070	1/30/89	---	9.3E	8.2	11.2
SEVENTYSIX CREEK	7100	2/01/89	---	7.5E	5.8	8.3	WATERSHED VIII						
SEVENTYSIX CK SNOTEL	7100	2/01/89	---	5.8S	4.4	6.3							
SHOSHONE BASIN	5810	1/27/89	---	6.8E	4.8	4.8							
SOUTH MOUNTAIN	6500	1/30/89	52	18.4	10.2	10.1							
SOUTH MTN PILLOW	6500	2/01/89	---	23.3	10.0	9.6							
SUSCOK CREEK AM	6100	1/27/89	43	14.6	4.8	4.4							
TAYLOR CANYON	6200	1/31/89	26	7.3	3.3	4.1							
TOE JAM AM	7700	1/30/89	28	7.7	---	7.4							
VAUGHT RANCH AM	5830	1/27/89	31	10.5	4.0	3.0							
WAR EAGLE	7280	1/27/89	48	15.8	4.8	18.3							



The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State	Idaho Department of Water Resources Soil and Water Conservation Districts of Idaho
Federal	U.S. Department of Agriculture Forest Service U.S. Department of Army Corps of Engineers U.S. Department of Commerce NOAA, National Weather Service U.S. Department of Interior Bureau of Reclamation Geological Survey, Water Resources Division Shoshone-Bannock Tribal Council
Local	Big Lost River Irrigation District Big Wood Irrigation Company Boise Project Board of Control Idaho Water District #01 Lewiston Orchards Irrigation District Little Wood River Irrigation District North Board of Control — Owyhee Project Salmon Falls Irrigation Company South Board of Control — Owyhee Project
Private	Cyprus Mining Company FMC Corporation Idaho Power Company Le Bois Resort Washington Water Power Company

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

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SOIL CONSERVATION SERVICE

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Boise,
Idaho



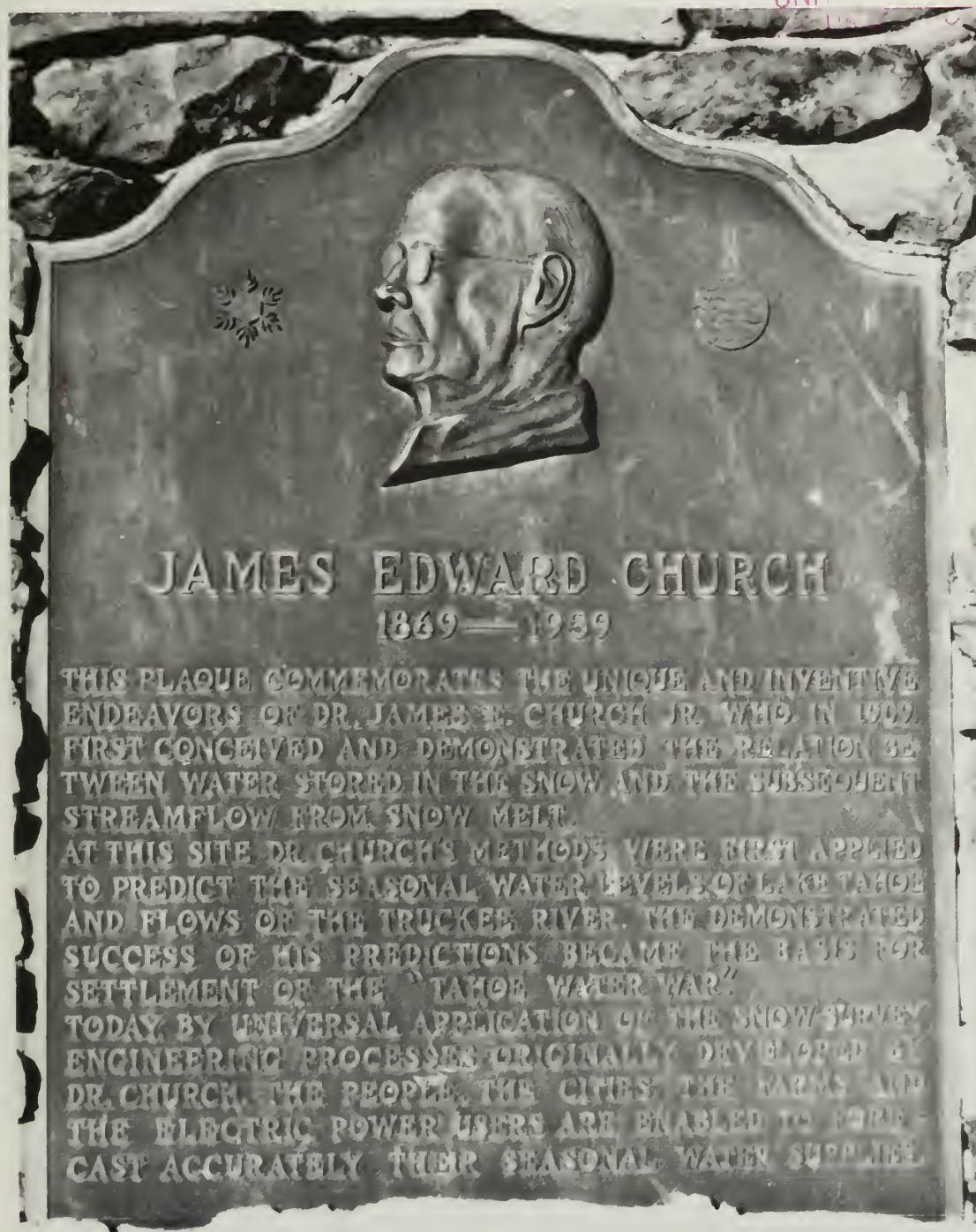
Idaho Water Supply Outlook

March 1, 1989

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Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Soil Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

An error is associated with each forecast, and this error decreases as the season progresses and more data becomes available. To express the range of error that can be expected, "most probable" forecasts are issued along with a range representing a "reasonable minimum" and a "reasonable maximum". Actual streamflow can be expected to fall within this range in eight out of ten years. Additionally two specific scenarios are provided based on the assumption that subsequent precipitation will be "wet", above average, or "dry", below average.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola Ave., Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Building A, 3rd floor, Denver, CO 80211
Idaho	3244 Elder Street, Room 124, Boise, ID 83705
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 87102-3157
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97204
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	W. 920 Riverside, Room 360, Spokane, WA 99201-1080
Wyoming	Federal Building, 100 "B" Street, Room 3124, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209-3489.

Water supply reports published by other agencies:

California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Idaho Water Supply Outlook

and

Federal — State — Private Cooperative Snow Surveys

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Boise, Idaho

COVER: This plaque on the outlet gate at Lake Tahoe, Nevada,
commemorates the start of snow surveys in 1909.

"Programs and assistance of the United States Department of Agriculture are
available without regard to race, creed, color, sex, age, or national origin."

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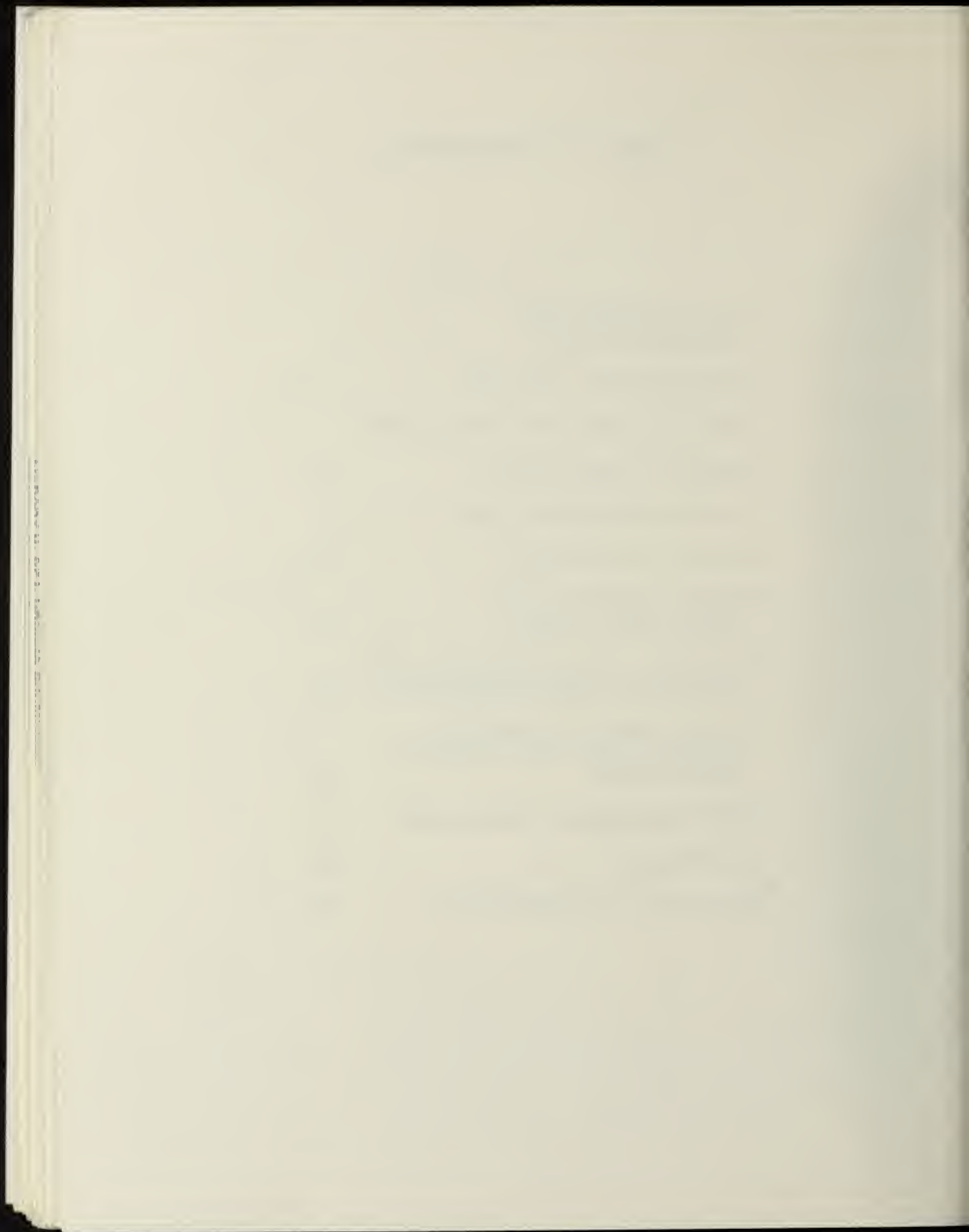
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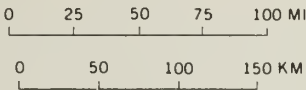
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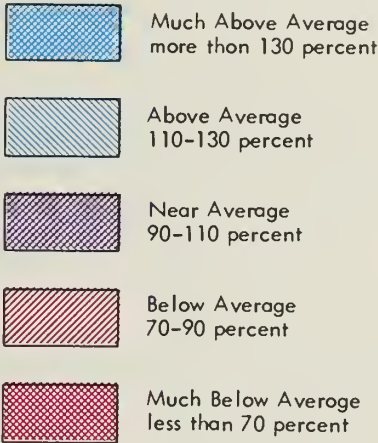
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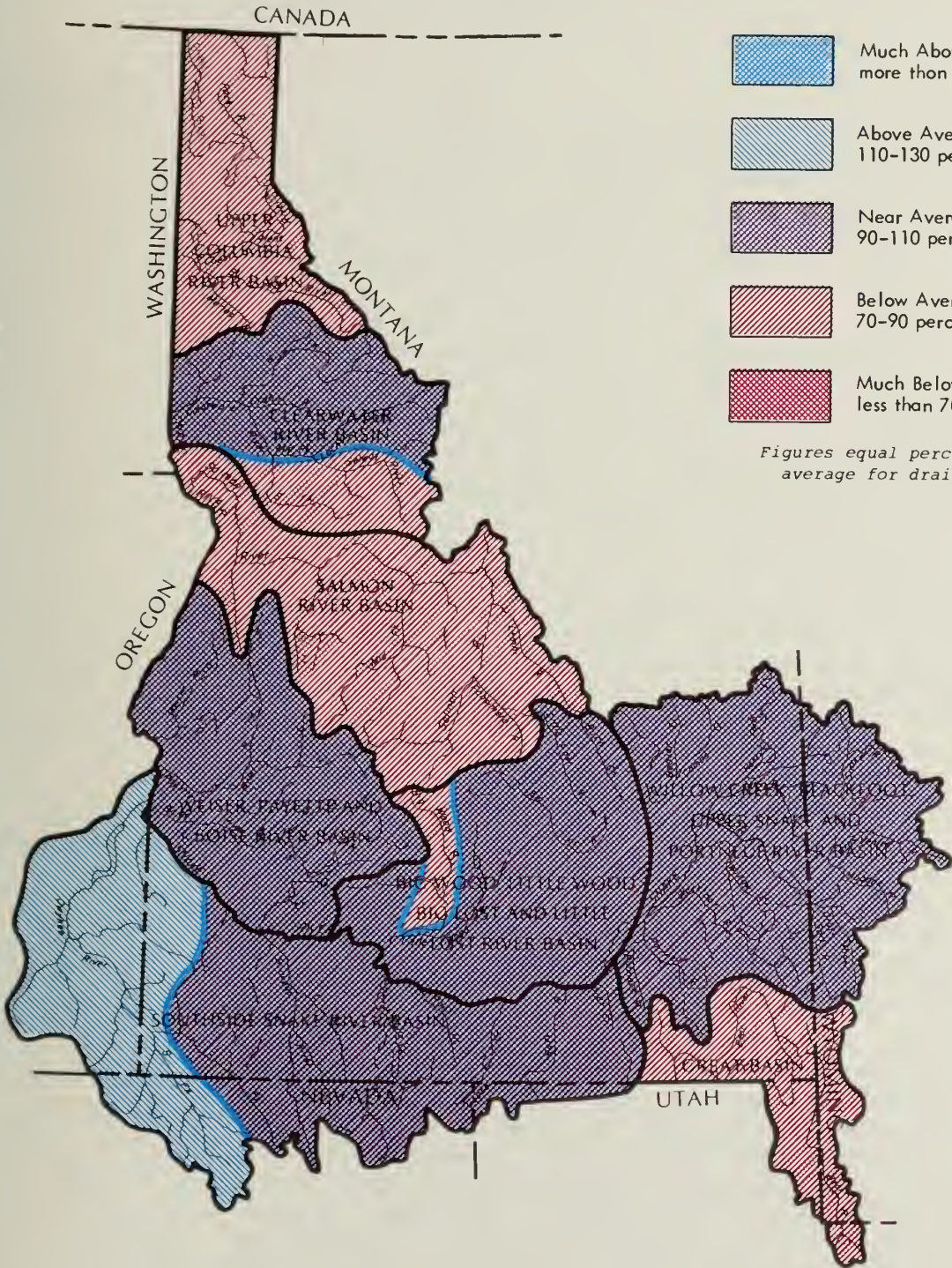
STREAMFLOW PROSPECTS
IDAHO



LEGEND



Figures equal percent of
average for drainage.



GENERAL OUTLOOK

SUMMARY:

DESPITE BELOW NORMAL SNOWFALL IN FEBRUARY, IDAHO'S MOUNTAIN SNOWPACK STILL HOVERS AROUND NORMAL AS WE ENTER THE LAST MAJOR SNOW ACCUMULATION PERIOD OF THE WINTER. WITH OVER 80 PERCENT OF THE WINTER BEHIND US, WATER USERS CAN FEEL CONFIDENT OF ADEQUATE WATER SUPPLIES IN MOST AREAS OF THE STATE. NORMAL SNOWFALL IN MARCH, COUPLED WITH NORMAL SPRING AND SUMMER PRECIPITATION PATTERNS, SHOULD TURN THIS OPTIMISTIC OUTLOOK INTO REALITY.

SNOWPACK:

February brought below normal snow accumulation over much of the state, and the March 1 snow surveys indicate snowpack conditions have decreased slightly in comparison to normal during the month. Snowpacks now range from slightly above to slightly below normal across most of the state. Several low elevation basins continue to report above to well above normal snowpacks. North Idaho snowpacks are slightly below normal, ranging from 84% of average on the Salmon River basin to 93% on the N.F. Clearwater. Exceptions to this are in the low elevation basins near Coeur d'Alene and Moscow where snowpacks are well above average. The central Idaho mountains report snowpacks hovering around the average mark for this time of year, ranging from 87% on the Big Wood basin to 113% on the Camas Creek drainage. In eastern Idaho and western Wyoming, snowpacks range from 90 to 117% of average except on the Salt River and Willow Creek drainages where snowpacks are 87 and 131%, respectively. Snowpacks on the south side of the Snake remain near to well above average, ranging from 101% on the Raft River to 139% on the Owyhee. The Great Basin area improved slightly during February, and snowpacks now range from 86% of normal on the Bear River to 107% on the Malad River.

RESERVOIRS:

Storage levels remain below to well below normal on most reservoirs across the state as of March 1. However, storage is improving slowly as many reservoir operators continue to store maximum allowable water. Twenty-six key reservoirs across the state report a combined storage of 70% of normal and 45% of capacity, ranging from a low of 22% of average (12% of capacity) in Magic Reservoir to 104% of average (58% of capacity) in Cascade Reservoir. Most smaller reservoirs are still expected to fill even though Apr-July streamflow forecasts have decreased slightly since last month. Some of the larger reservoir systems may fall short of filling but should provide adequate water supplies to meet user needs, assuming normal precipitation is received during the spring and early summer runoff period.

PRECIPITATION:

February began very dry throughout Idaho with the exception of the southeast corner of the state. By the middle of the month a series of wet Pacific storms began to track across southern Idaho, and many of the valley stations ended up above normal for the month. For the remainder of the state, precipitation fell well short of average. North Idaho ranged from 20% of normal precipitation at Sandpoint to 61% at Pierce. Central Idaho was also well below normal except for Grangeville with 114%, and Salmon with 102%. Otherwise, averages ranged from 43% at Dixie to 79% at Fenn Ranger Station. Southern Idaho stations were generally above normal except for the Magic Valley and a few stations in the extreme southeast corner. February precipitation ranged from 107% of normal at Boise to 196% at Idaho Falls. On the low side, Twin Falls reported only 57% of normal. The state as a whole averaged only 66% of normal. February was very cold due to a very strong Arctic outbreak during the first ten days of the month. Many temperature records were broken during this period of extreme cold. Boise averaged the coldest with a departure of 12.9 degrees below normal. Lewiston averaged a minus 11.9 degrees.

STREAMFLOW:

Most volume streamflow forecasts have been lowered slightly from last month to reflect the below normal snow accumulation during February. However, the water supply outlook for the 1989 season continues to look optimistic with most basins expected to produce near or only slightly below normal runoff. In north Idaho, Apr-Sept streamflow forecasts now range from 86 to 92% of normal runoff. In the central part of the state, streamflow projections range from 85 to 95% of normal while basins in eastern Idaho and western Wyoming are forecast to yield between 98 and 108% of normal flows. Basins on the south side of the Snake show the best prospects in the state, ranging from 106% of normal for inflow to Oakley Reservoir to 118% for the inflow to Owyhee Reservoir.

In the Bear River basin, forecasts improved slightly on tributaries in the northern part of the drainage while the Bear River mainstem decreased slightly. Apr-Sept streamflow forecasts for this area now range from 73% of normal for the Bear at Harer to 89% on the Cub River near Preston.

RECREATIONAL OUTLOOK:

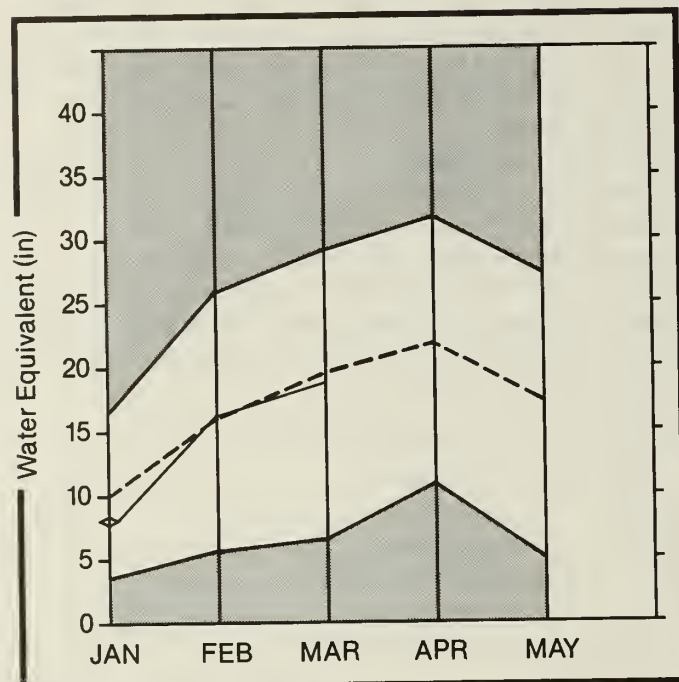
Outdoor enthusiasts can still expect near normal streamflows this spring and summer, according to March 1 snow surveys. The arctic cold wave and below normal precipitation of February resulted in a drop in most basin snowpacks of about 10%, in terms of percent of normal. Spring-like temperatures in March will bring some runoff and recreation opportunities as the low elevation snowpack melts in the Owyhee River basin in southwestern Idaho. Elsewhere, spring weather will be the major factor in determining the timing of snowmelt runoff. Above 7000 feet, the mountain soils are dry, indicating that little or no snowmelt has occurred. Floaters can continue to smile and tune up their gear as most whitewater river basins can expect near or above normal streamflow.

SOIL MOISTURE:

Soil moisture conditions have not changed significantly over the winter and most soils continue to have below normal moisture. Mountain soils throughout the state are not frozen, due to the deep winter snowpack, but remain very dry. In the lower elevations, soil moisture conditions have improved with recent snowmelt and rain but remain drier than normal. Some low elevation soils, however, are frozen and have absorbed little moisture. Above normal amounts of this spring's snowmelt will be absorbed into the soil profile to recharge the dry soils. The degree of water loss into the soils will be dependent upon spring weather conditions. Early, slow snowmelt, such as occurred in 1987, will result in high losses to the soil.

Upper Columbia Basin

Mountain snowpack* (inches)



*Based on selected stations

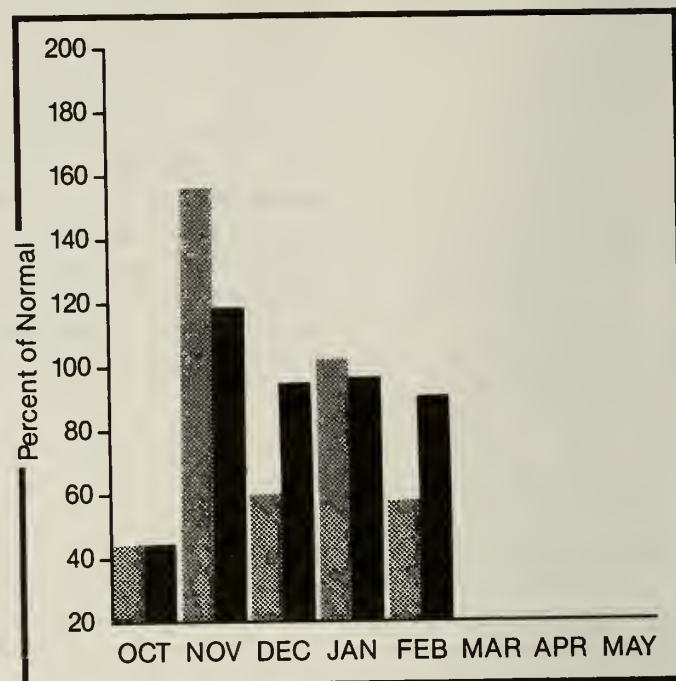
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

In comparison to normal, basin snowpack conditions have dropped somewhat from the figures reported Feb 1 and are now slightly below normal on most major basins. Snowpacks range from 82% of average on the Moyie River basin to 92% on the Priest River. Snowpacks in the low elevations, however, are reported to be well above normal with most snow courses reporting over 150% of average snowpack. Lower elevation basins in the Coeur d'Alene and Moscow areas are expected to produce above normal snowmelt flows from snowpacks ranging from 117% on Rathdrum Creek to 165% on the Palouse River. Elsewhere, Apr-Sept streamflow volumes are forecast to be slightly below normal, ranging from 86% of average on the Spokane River to 90% on the Priest and Coeur d'Alene Rivers. Carryover storage in the major lakes and reservoirs remains below to well below normal, ranging from 41 to 81% of average.

UPPER COLUMBIA RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
KOOTENAI at Leonia (2)	APR-SEP	7440	88			9130	5750	8441
	APR-JUL	6470	88			7940	5000	7340
	APR-JUN	5190	88			6370	4010	5899
CLARK FORK at Whitehorse Rapids (2)	APR-SEP	11800	88			14900	8720	13370
	APR-JUL	10700	88			13500	7910	12150
	APR-JUN	9120	88			11500	6740	10360
PEND OREILLE LAKE inflow (2)	APR-SEP	13200	88			16500	9920	14930
	APR-JUL	12100	89			15100	9100	13650
	APR-JUN	10400	88			13000	7810	11780
PRIEST nr Priest River (2)	APR-SEP	805	90			1040	575	893
	APR-JUL	755	90			975	535	838
COEUR D'ALENE at Enaville	APR-SEP	750	90			1130	370	830
	APR-JUL	700	89			1080	345	789
SPOKANE nr Post Falls (2)	APR-SEP	2420	86	2840	2030	3350	1490	2820
	APR-JUL	2340	86	2780	1900	3240	1440	2723
ST. JOE at Calder	APR-SEP	1130	88	1310	975	1440	825	1281
	APR-JUL	1060	88	1230	915	1350	770	1211

RESERVOIR STORAGE

(1000AF)

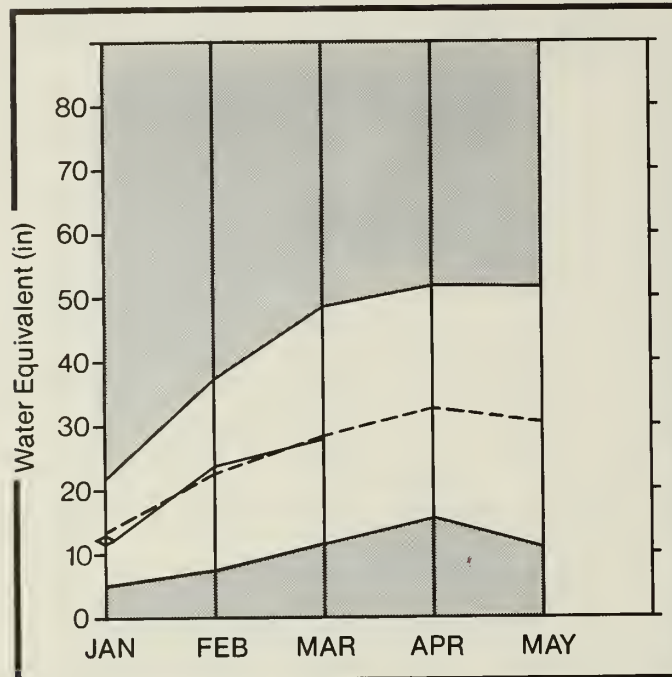
WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
HUNGRY HORSE	3451.0	1296.0	1400.0	2257.0	Kootenai ab Bonners Ferry	54	130	83
FLATHEAD LAKE	1791.0	774.0	889.0	901.0	Moyie River	3	135	82
PEND OREILLE	1561.2	545.4	560.4	831.8	Pend Oreille River	161	126	88
NOXON RAPIDS	335.0	260.5	321.6	297.6	Clark Fork River	111	118	86
COEUR D'ALENE	291.2	91.2	102.2	220.9	Priest River	6	132	92
PRIEST LAKE	97.7	27.8	44.8	34.4	Rathdrum Creek	2	154	117
					Hayden Lake	4	260	156
					Coeur d'Alene River	10	134	89
					St. Joe River	9	128	85
					Spokane River	23	139	91
					Palouse River	2	347	174

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.
 REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.
 (1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.
 (2) - Corrected for upstream diversions or changes in reservoir storage.

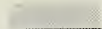
Clearwater River Basin

Mountain snowpack* (inches)



*Based on selected stations

Maximum



Average



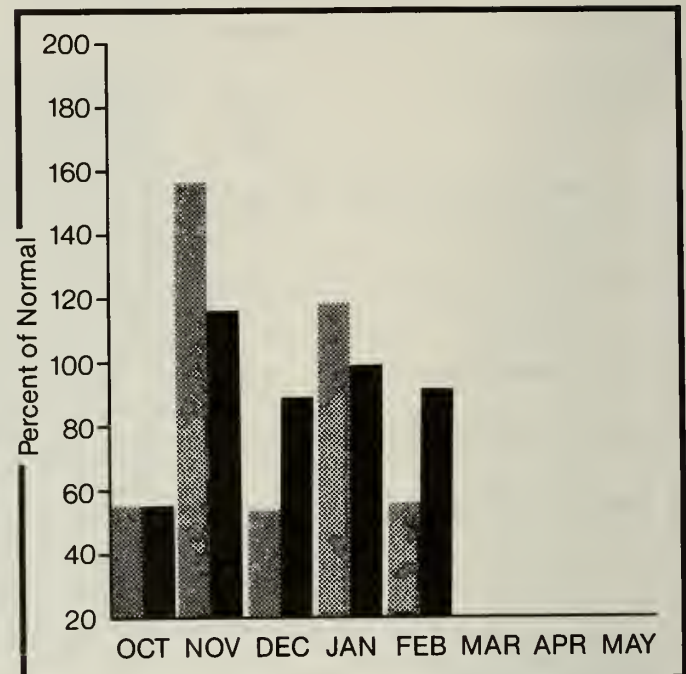
Minimum



Current



Precipitation* (percent of normal)

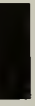


*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Snowpacks on the Clearwater basin are slightly below normal for March 1 with basin snowpacks ranging from 86 to 93% of average. These figures indicate a 6-8% decrease in comparison to normal from those reported a month ago. Lower elevation snow courses in the Moscow, Bovill, and Pierce areas however, continue to report above to well above normal snowpacks, ranging from 125 to 160% of normal snow accumulation. Small tributaries in these areas are expected to produce above normal snowmelt flows while the Clearwater mainstem is forecast to be slightly below normal. Storage in Dworshak Reservoir was lowered approximately 200,000 Ac-Ft for power generation during the extremely cold period in late January and early February, and is currently at 85% of average and 51% of capacity.

For more information contact your local Soil Conservation Service office.

CLEARWATER RIVER BASIN

STREAMFLOW FORECASTS

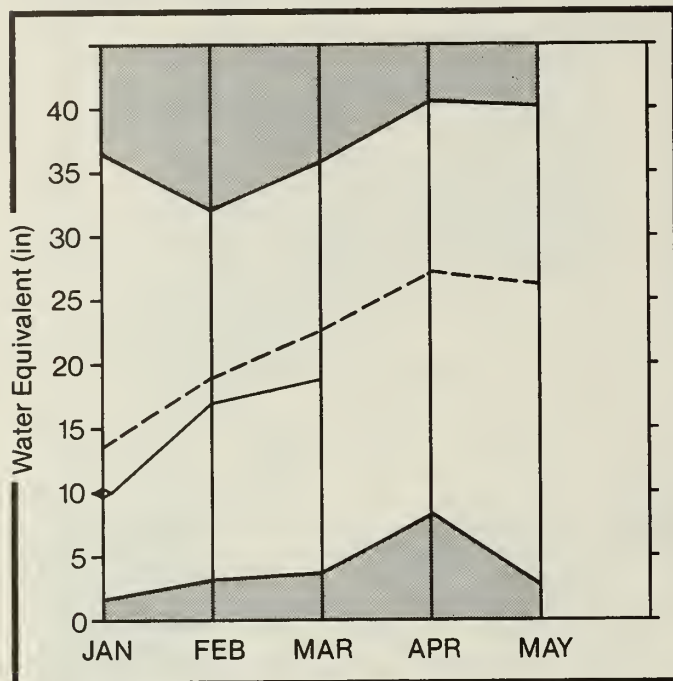
FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
DWORSHAK RESERVOIR inflow	APR-SEP APR-JUL	2720 2530	90 90			3710 3460	1730 1600	3010 2822
CLEARWATER at Orofino	APR-SEP APR-JUL	4740 4510	92 92			6390 6030	3140 2950	5163 4889
CLEARWATER at Spalding	APR-SEP APR-JUL	7650 7270	91 92			10200 9640	5140 4900	8378 7916

RESERVOIR STORAGE (1000AF)				WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'0	THIS YEAR AS % OF LAST YR. AVERAGE
DWORSHAK	3467.8	1776.4	1835.2	2084.1	North Fork Clearwater	12	134 93
					Lochsa River	5	118 91
					Selway River	6	106 86
					Clearwater River	20	126 91





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Salmon River Basin

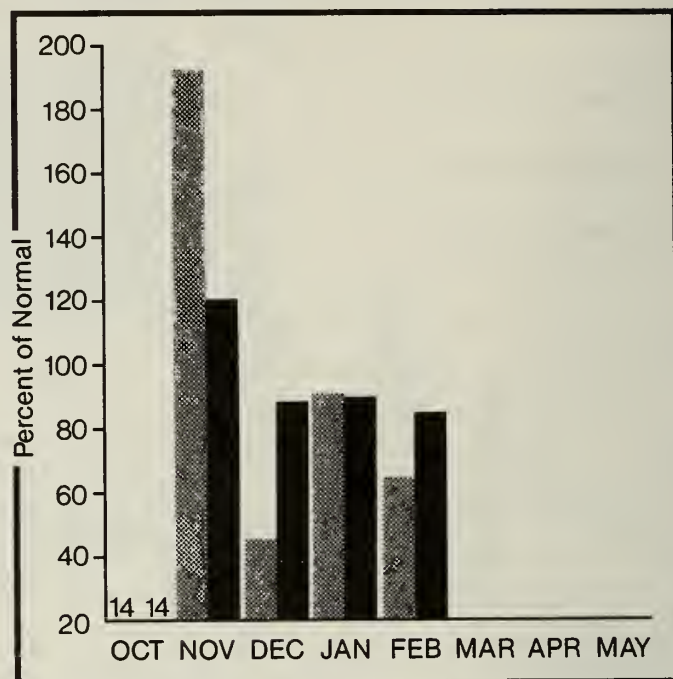
Mountain snowpack* (inches)



*Based on selected stations

Maximum  Average 
Minimum  Current 

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation  Year to date precipitation 

WATER SUPPLY OUTLOOK:

Snowpack conditions in the Salmon basin show a slight decrease in comparison to normal from those reported a month ago. Basin snowpacks now range from 82 to 84% of average. Apr-Sept streamflow volumes are expected to be slightly below normal, and should provide good flows for whitewater boating and other recreational uses this spring and summer.

For more information contact your local Soil Conservation Service office.

SALMON RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
SALMON at Salmon	APR-SEP	930	86			1320	530	1077
	APR-JUL	790	86			1120	460	919
SALMON at White Bird	APR-SEP	6030	86			7920	4070	7007
	APR-JUL	5440	86			7150	3730	6322

RESERVOIR STORAGE

(1000AF)

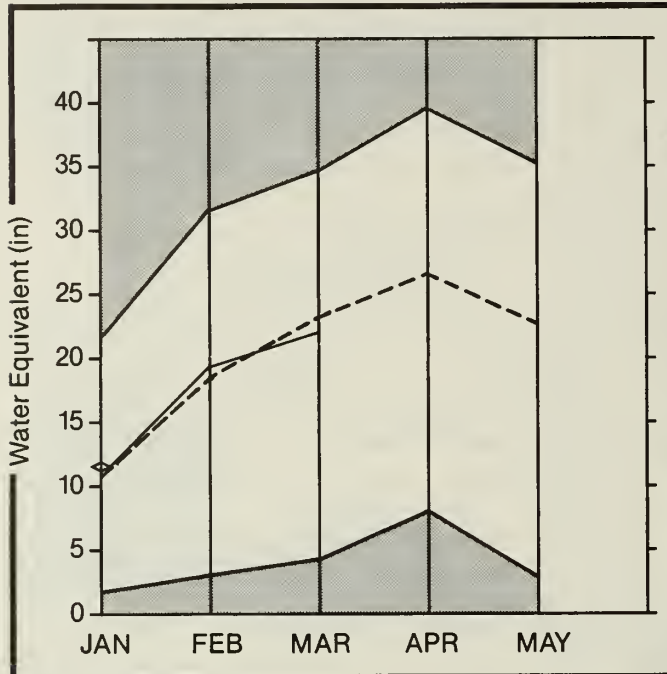
WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
					Salmon River ab Salmon	11	124	82
					Lemhi River	12	112	84
					Salmon River Total	34	122	84

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.
 REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.
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Weiser, Payette, and Boise River Basin

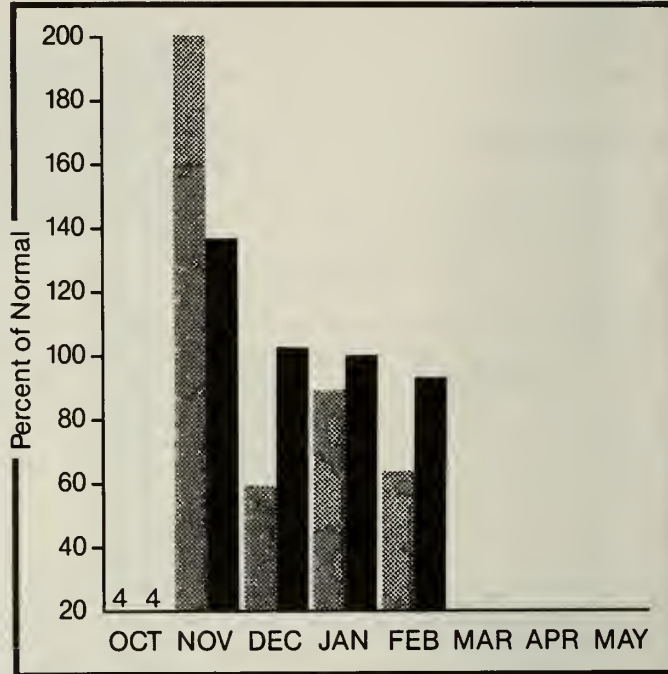
Mountain snowpack* (inches)



*Based on selected stations

Maximum Average Minimum Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation Year to date precipitation

WATER SUPPLY OUTLOOK:

Basinwide snowpack conditions have dropped 5 to 15% in comparison to normal from figures reported near Feb 1 but remain near average, ranging from 90% of normal on the Middle Fork of the Boise to 105% on the Weiser River. Exceptions to these are the Mann Creek watershed near Weiser and the Canyon Creek basin near Mountain Home which report 128 and 146% respectively. In general, higher elevation stations report near to slightly below normal snowpacks while lower elevation stations report above to well above normal snow water content. Apr-Sept streamflow projections have been reduced slightly from last month but remain near normal, ranging from 90 to 95% of average. Reservoirs continue to fill with available flows, but carryover storage remains below to well below normal in all systems except Cascade Reservoir, which reports 104% of normal storage. Although some major reservoirs may not fill to capacity, water supplies are expected to be adequate to meet user needs for the 1989 irrigation season.

WEISER, PAYETTE, AND BOISE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
WEISER nr Weiser	APR-SEP	420	95			640	194	444
	APR-JUL	390	94			595	179	414
NF PAYETTE at Cascade (2)	APR-SEP	515	91	520	515	610	420	568
	APR-JUL	480	90	490	475	570	395	531
NF PAYETTE nr Banks (2)	APR-SEP	670	91	760	580	845	495	737
	APR-JUL	630	91	720	540	795	465	691
PAYETTE nr Horseshoe Bend	APR-SEP	1680	90	1850	1570	2070	1290	1862
	APR-JUL	1550	90	1690	1410	1910	1190	1717
SF PAYETTE at Lowman	APR-SEP	470	91	500	440	580	360	516
	APR-JUL	415	91	445	385	510	320	458
DEADWOOD RESERVOIR inflow	APR-JUL	130	91			161	99	143
BOISE nr Twin Springs (1)	APR-SEP	675	93	740	610	820	530	722
	APR-JUL	620	93	685	555	755	485	664
BOISE nr Boise (1)	APR-SEP	1480	91	1680	1300	1940	1040	1628
	APR-JUL	1370	91	1570	1200	1780	980	1508
	APR-JUN	1210	91	1370	1060	1580	865	1334
SF BOISE at Anderson Ranch Dam (1)	APR-SEP	555	90	625	500	675	445	619
	APR-JUL	520	90	585	475	630	410	578

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF
		THIS YEAR	LAST YEAR	AVG.			LAST YR. AVERAGE
MANN CREEK	11.3	3.4	2.8	6.8	Mann Creek	4	212 128
CASCADE	703.2	407.6	363.1	393.8	Weiser River	8	173 105
DEADWOOD	162.0	61.7	67.7	84.5	North Fork Payette	9	139 90
ANDERSON RANCH	464.2	129.6	123.1	282.1	South Fork Payette	7	144 91
ARROWROCK	286.6	168.0	156.6	234.8	Payette River Total	16	141 91
LUCKY PEAK	307.0	70.5	116.3	122.5	Middle & North Fork Boise	7	136 90
LAKE LOWELL (DEER FLAT)	177.0	87.2	88.9	140.6	South Fork Boise River	9	155 100
					Boise River Total	18	161 104
					Canyon Creek	2	204 146

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.

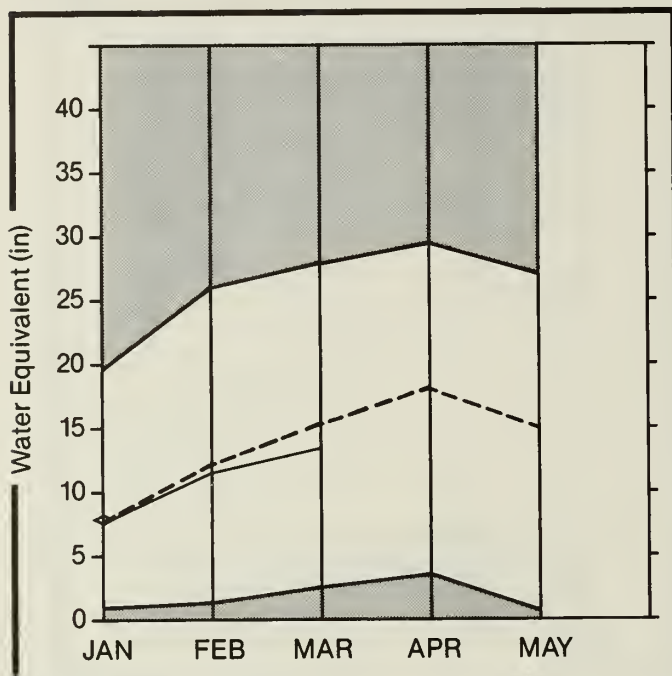
REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.

(1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.

(2) - Corrected for upstream diversions or changes in reservoir storage.

Big Wood, Little Wood, Big Lost, and Little Lost River Basin

Mountain snowpack* (inches)



*Based on selected stations

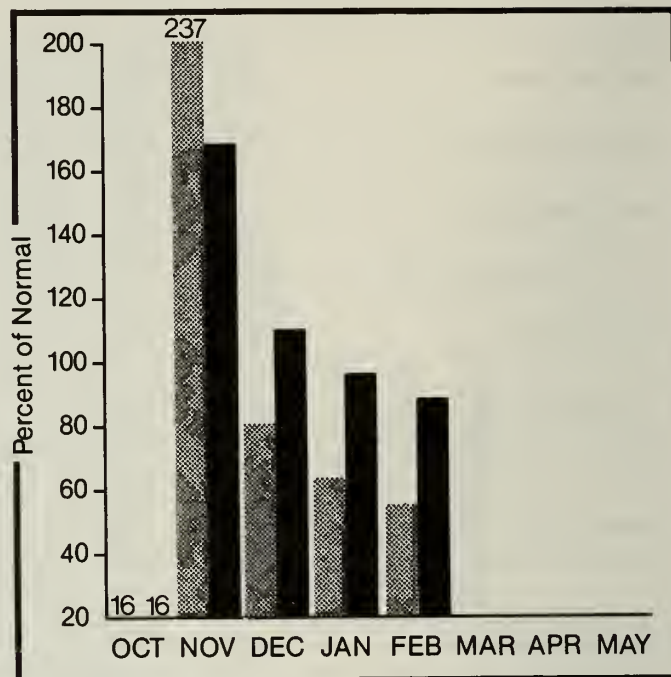
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

In comparison to normal, March 1 basin snowpack figures dropped slightly from those reported a month ago, but conditions remain near normal for this time of year. Currently, snowpacks range from 87% of average on the Big Wood mainstem to 113% on the Camas Creek drainage near Fairfield. Higher elevation sites report near to slightly below average snowpacks while lower elevation stations are showing near to above average conditions. Apr-Sept streamflow projections also dipped slightly from those issued last month and remain near to slightly below normal, ranging from 85 to 93% of average. Storage volumes in the major reservoirs remain low, ranging from 22% of average (12% of capacity) in Magic Reservoir to 73% of average (53% of capacity) in Mackay Reservoir. Water supplies should be adequate to meet user needs in most watersheds.

BIG WOOD, LITTLE WOOD, BIG LOST, AND LITTLE LOST RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
BIG WOOD nr Bellevue	APR-SEP	184	85	205	160	240	128	217
	APR-JUL	172	85	192	150	225	119	202
MAGIC RESERVOIR inflow	APR-SEP	295	87	320	270	440	150	338
	APR-JUL	280	87	305	255	420	142	322
LITTLE WOOD nr Carey	APR-SEP	96	90	109	84	126	66	107
	APR-JUL	89	90	101	77	117	61	99
BIG LOST at Howell Ranch nr Chilly	APR-SEP	200	91	220	180	275	126	219
	APR-JUL	177	92	194	160	240	112	192
	APR-JUN	136	92	148	124	186	86	148
BIG LOST bl Mackay Reservoir (2)	APR-SEP	172	88	192	154	240	106	195
LITTLE LOST bl Wet Ck	APR-SEP	36	93	42	32	50	22	39
	APR-JUL	29	92	34	25	41	17.4	31
LITTLE LOST nr Howe	APR-SEP	40	91	44	37	55	25	44
	APR-JUL	30	91	33	28	41	19.1	33

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
MAGIC	191.5	22.7	23.6	102.4	Big Wood ab Magic	10	149	87
LITTLE WOOD	30.0	12.2	14.6	17.6	Camas Creek	5	194	113
CAREY VALLEY		NO REPORT			Big Wood Total	15	160	94
MACKAY	44.5	23.8	26.7	32.6	Little Wood River	3	183	95
					Fish Creek	3	206	106
					Big Lost River	8	151	90
					Little Lost River	4	124	95

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.

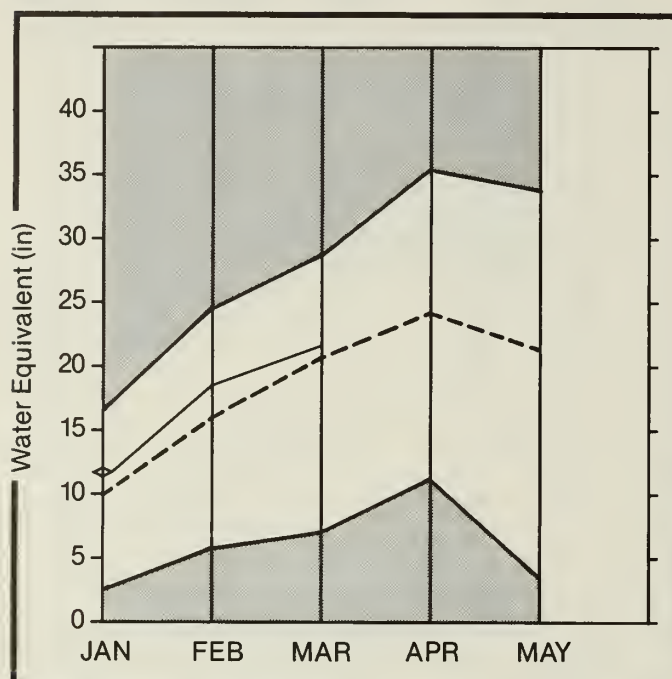
REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.

(1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.

(2) - Corrected for upstream diversions or changes in reservoir storage.

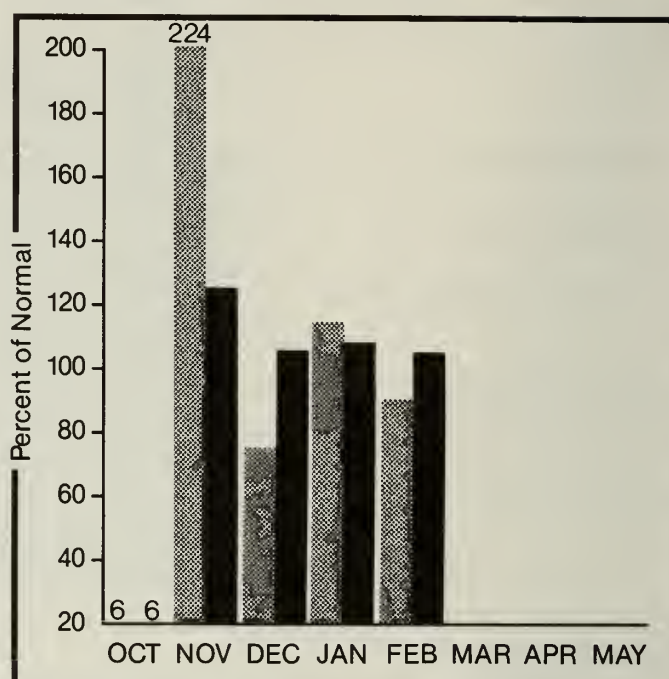
Willow Creek, Blackfoot, Upper Snake, and Portneuf River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum ——— Average - - - -
Minimum ——— Current ◊ ———

Monthly precipitation [hatched bar] Year to date precipitation [solid black bar]

WATER SUPPLY OUTLOOK:

Snowpacks in several basins (Beaver-Camas, Henry's Fork, Teton, and Upper Snake above Moran) show a 10-20% drop in comparison to normal from a month ago. Still, snow conditions remain near to slightly above normal on all major basins, ranging from 87% of average on the Salt River to 131% on the Willow Creek basin. Most watersheds report between 90-110% of average snowpack. Apr-Sept streamflow prospects have lowered somewhat to reflect the change in snowpack conditions but remain near normal, ranging from 98 to 108% of average. Reservoir storage continues to improve but remains below normal, ranging from 58 to 87% of average. The combined storage for the eight major reservoirs in the Upper Snake basin is 65% of normal and 50% of capacity. Current conditions indicate water supplies should be good for the coming season.

WILLOW CREEK, BLACKFOOT, UPPER SNAKE, AND PORTNEUF RIVER BASIN

STREAMFLOW FORECASTS

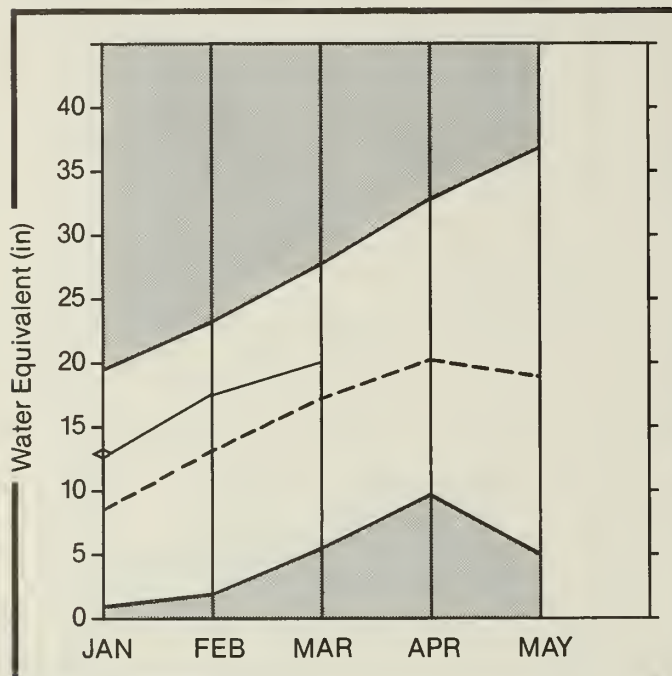
FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
HENRYS FORK nr Ashton (2)	APR-SEP	755	101	800	725	830	690	746
	APR-JUL	565	101	605	525	620	510	557
HENRYS FORK nr Rexburg (2)	APR-SEP	1580	99	1680	1480	1870	1290	1595
	APR-JUL	1250	99	1340	1160	1480	1010	1260
FALLS nr Squirrel	APR-JUL	380	102			450	310	373
TETON ab S Leigh Ck. nr Driggs	APR-SEP	190	98	210	171	215	165	194
	APR-JUL	142	98	158	126	161	123	145
TETON nr St. Anthony	APR-SEP	475	99	500	450	535	415	479
	APR-JUL	385	99	410	360	435	335	387
SNAKE nr Moran (1)	APR-SEP	960	108	1010	905	1080	835	888
PALISADES RESERVOIR inflow (1)	APR-SEP	3880	101	4070	3730	4770	3030	3852
SNAKE nr Heise (2)	APR-SEP	4140	100	4470	3810	5050	3270	4142
	APR-JUL	3520	100	3840	3200	4300	2780	3524
SNAKE nr Blackfoot (2)	APR-SEP	5620	99	6070	5170	6700	4540	5680
	APR-JUL	4530	99	4990	4070	5400	3700	4589
PORTNEUF at Topaz	MAR-SEP	109	100	117	100	148	70	109
	MAR-JUL	88	100	93	80	120	56	88

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
ISLAND PARK	127.6	81.5	118.2	110.1	Camas-Beaver Creeks	6	206	117
GRASSY LAKE	15.2	9.0	9.2	10.9	Henrys Fork River	13	142	113
JACKSON LAKE	624.4	119.0	96.1	535.9	Teton River	9	133	106
PALISADES	1357.0	597.2	835.3	1028.0	Snake above Palisades	31	127	99
AMERICAN FALLS	1700.0	1112.2	1350.9	1277.2	Snake above Jackson Lake	9	121	104
BROWNLEE	975.3	432.5	601.1	531.0	Gros Ventre River	3	134	100
BLACKFOOT	348.7	153.0	251.1	242.1	Greys River	5	119	90
HENRY'S LAKE	90.4	67.3	78.1	79.4	Salt River	7	128	87
RIRIE	96.5	42.6	49.8	51.3	Willow Creek	9	181	131
					Blackfoot River	9	156	105
					Portneuf River	13	163	106
					Toponce Creek	3	175	109

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.
 REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.
 (1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.
 (2) - Corrected for upstream diversions or changes in reservoir storage.

Southside Snake River Basin

Mountain snowpack* (inches)

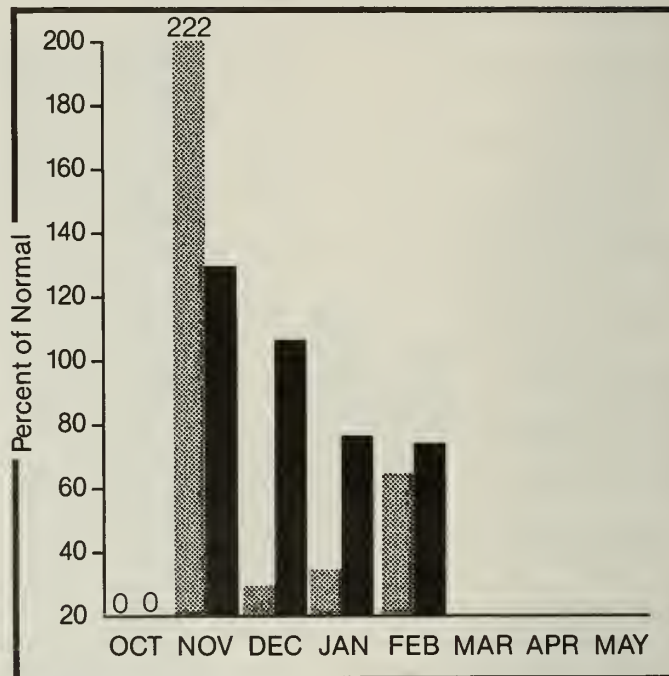


*Based on selected stations

Maximum —
Minimum —

Average ----
Current ◇—

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation [hatched bar]

Year to date precipitation [solid black bar]

WATER SUPPLY OUTLOOK:

Snowpack conditions remain near or above normal on the South side of the Snake, in spite of a 15 to 30% drop in percent of average from last month. Snowpacks now range from 101% of average on the Raft River to 139% on the Owyhee basin. Mar-Sept and Apr-Sept streamflow projections have been reduced for the second consecutive month and are now near to slightly above normal. Forecasts currently range from 105% on the Owyhee near Owyhee to 118% for the inflow to Owyhee Reservoir. Reservoir storage in Owyhee Reservoir increased by 53,000 acre-feet during February but is currently only 28% of average and 19% of capacity. Oakley and Salmon Falls reservoirs show 41 and 44% of average storage respectively. Water supplies look good for the Bruneau and Owyhee basins. Irrigation supplies on the Salmon Falls and Oakley systems should be much better than last year, but may fall short of full allotments.

SOUTHSIDE SNAKE RIVER BASIN

STREAMFLOW FORECASTS

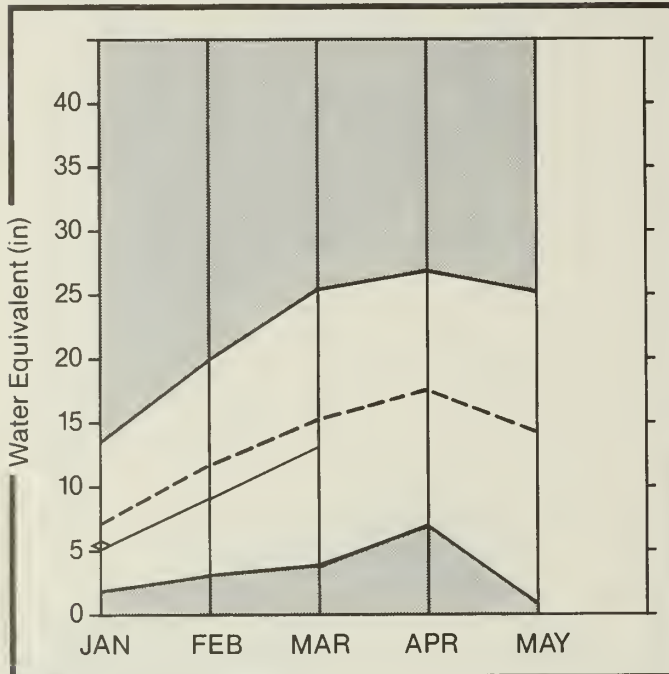
FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
OAKLEY RESERVOIR inflow	APR-SEP	35	106	36	34	47	24	33
	APR-JUL	32	108	33	31	42	22	30
SALMON FALLS CK nr San Jacinto	MAR-SEP	109	107	121	97	147	71	102
	MAR-JUL	105	108	119	91	140	68	97
	MAR-JUN	98	108	110	85	131	64	91
BRUNEAU nr Hot Spring	MAR-SEP	280	108	315	255	380	179	260
	MAR-JUL	265	107	295	235	360	171	248
OWYHEE nr Gold Ck (2)	MAR-JUL	35	106			52	17.5	33
OWYHEE nr Owyhee (2)	APR-JUL	90	105	116	64	136	44	86
OWYHEE nr Rome (2)	MAR-JUL	610	115	630	585	875	345	532
OWYHEE RESERVOIR inflow (1)	APR-SEP	535	118	545	525	705	330	455
	MAR-JUL	670	113	695	645	910	435	591

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'O	THIS YEAR AS % OF LAST YR.	% OF AVERAGE
OAKLEY	77.4	12.3	12.9	29.9	Raft River	9	153	101
SALMON FALLS	182.6	23.7	38.8	53.9	Goose-Trapper Creeks	6	157	104
OWYHEE	715.0	134.1	219.4	486.6	Salmon Falls Creek	11	151	108
					Bruneau River	11	162	121
					Owyhee River	16	167	135

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.
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Great Basin

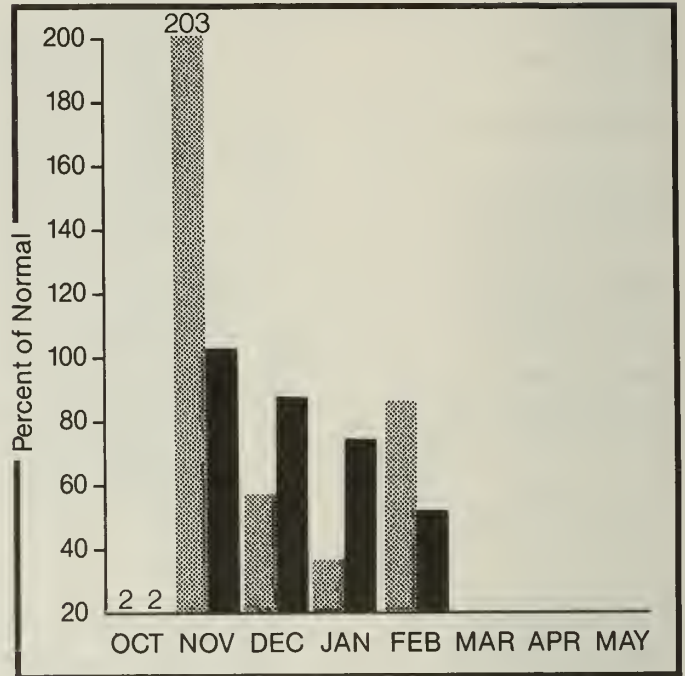
Mountain snowpack* (inches)



*Based on selected stations

Maximum ——— Average - - - - -
Minimum ——— Current ◇ ———

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation [hatched bar] Year to date precipitation [solid black bar]

WATER SUPPLY OUTLOOK:

The Great Basin is the only area in the state to report a general improvement in snowpack conditions during February. Snowpacks, however, still remain near to slightly below normal, ranging from 86% of average on the Bear River basin above Harer to 107% on the Malad basin. Apr-Sept streamflow forecasts have been increased from a month ago on Montpelier Creek and the Cub River, but have been reduced on the Bear River at Harer. Forecasts now range from 73 to 89% of average. Reservoir storage remains low with Bear Lake reporting 83% of normal storage (58% of capacity) and Montpelier Creek Reservoir showing only 35% of normal (15% of capacity).

GREAT BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
BEAR nr Harer	APR-SEP	225	73	255	215	365	86	310
MONTPELIER CK nr Montpelier	APR-SEP	12.0	86	12.8	11.2	17.3	6.7	13.9
CUB nr Preston	APR-SEP	46	89	54	40			52
	APR-JUL	42	90	49	36	56	28	47

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
BEAR LAKE	1421.0	826.4	1036.2	992.5	Bear River (above Harer)	12	126	86
MONTPELIER CREEK	4.0	0.6	1.2	1.7	Montpelier Creek	6	118	89
					Mink Creek	5	144	98
					Cub River	4	158	106
					Malad River	7	186	107

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.
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SNOW DATA MEASUREMENTS

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85														
UPPER COLUMBIA BASIN							WATERSHED I							CLEARWATER BASIN							WATERSHED II						
ABOVE BURKE	4100	2/27/89	---	15.2E	12.4	19.0	BREEZY SADOLE	5010	3/03/89	81	24.0	19.6	27.7														
ABOVE ROLAND	4350	2/27/89	---	20.5E	15.3	27.0	CAYUSE AIRSTRIP	3500	3/03/89	44	11.4	8.1	11.2														
BEAR MOUNTAIN	5400	2/24/89	109	43.6	32.6	53.0	COOL CREEK	6250	3/03/89	124	39.4	30.2	42.6														
BEAR MTN	PILLOW 5400	3/01/89	---	41.6	30.4	53.8	COOL CREEK	PILLOW 6280	3/01/89	---	36.8	29.6	40.1														
BENTON MEADOW	2370	2/27/89	21	6.5	4.0	6.0	CRATER MEADOWS	5960	3/03/89	108	34.9	27.2	38.0														
BENTON SPRING	4920	2/27/89	51	16.4	10.4	17.2	CRATER MUWS	PILLOW 5960	3/01/89	---	36.0	27.9	40.0														
BREEZY SADDLE	5010	3/03/89	81	24.0	19.6	27.7	CROOKEU FORK	3610	3/03/89	46	14.0	10.8	11.9														
CHILCO RIDGE	3650	3/08/89	---	10.7E	2.7	6.2	ELK BUTTE	PILLOW 5550	3/01/89	---	33.9	21.4	37.2														
CONIE RIDGE	3900	3/08/89	38	12.4	3.3	7.4	FISH LAKE AIRSTRIP	5650	3/03/89	102	30.8	28.6	34.7														
COPPER RIDGE	4820	3/01/89	---	20.0E	15.5	23.8	FORTY-NINE MEADOWS	4830	3/03/89	---	23.3E	19.1	26.3														
CORNER CREEK	3150	3/08/89	37	12.4	6.2	6.6	HEMLOCK BUTTE	5810	3/03/89	122	38.9	27.5	42.7														
EAST RAGGED SADDLE	3740	3/04/89	72	19.0	13.4	18.0	HEMLOCK BUTTE PILLOW	5810	3/01/89	---	41.7	26.9	42.8														
EAST TWIN	4130	3/01/89	46	15.7	5.7	9.9	HOODOO BASIN PILLOW	6050	3/01/89	---	32.2	27.6	41.4														
FORTY-NINE MEADOWS	4830	3/03/89	---	23.3E	19.1	26.3	HOODOO CREEK	5900	2/25/89	88	31.6	28.9	40.7														
FOURTH OF JULY SUM	3200	2/27/89	39	11.8	6.2	8.2	KIT CARSON PASTURE	4950	2/26/89	31	8.7	8.4	7.8														
HUMBOLDT GULCH	4250	2/27/89	42	11.5	10.4	14.2	LOLO PASS	5240	3/02/89	74	21.2	18.2	26.6														
HUMBOLDT GLCH PILLOW	4250	3/01/89	---	10.9	7.6	13.2	LOLO PASS	PILLOW 5240	3/01/89	---	22.6	20.3	28.8														
KELLOGG PEAK	AM 5560	2/26/89	73	22.9	18.2	27.3	LOST LAKE	6110	3/03/89	120	41.0	30.1	48.9														
LOOKOUT	5140	3/01/89	79	22.4	18.4	29.5	LOST LAKE	PILLOW 6110	3/01/89	---	44.2	31.3	55.0														
LOOKOUT	PILLOW 5140	3/01/89	---	23.6	17.7	28.4	MOUNTAIN MEADOWS	6360	2/27/89	---	15.0E	14.1	20.8														
LOST LAKE	6110	3/03/89	120	41.0	30.1	48.9	MOUNTAIN MDWS PILLOW	6360	3/01/89	---	17.5	16.3	23.2														
LOST LAKE	PILLOW 6110	3/01/89	---	44.2	31.3	55.0	NEZ PERCE PASS	6570	2/26/89	48	14.4	13.6	15.0														
LOWER SANDS CREEK	3120	3/08/89	---	20.9E	13.3	16.8	PIERCE R.S.	3080	2/28/89	45	14.5	7.4	10.0														
MOSCOW MOUNTAIN	4410	3/01/89	64	22.8	---	14.9	SAVAGE PASS	6170	3/02/89	75	21.0	18.6	23.3														
MOSQUITO RIDGE	5200	2/26/89	94	30.1	21.9	33.7	SAVAGE PASS	PILLOW 6170	3/01/89	---	20.9	18.7	24.6														
MOSQUITO	PILLOW 5200	3/01/89	---	30.0	20.4	34.0	SHANGHAI SUMMIT	4570	3/03/89	93	29.2	14.4	23.4														
ROLAND SUMMIT	5120	2/26/89	---	25.9E	15.3	32.8	SHANGHAI SUM PILLOW	4570	3/01/89	---	29.9	15.3	24.8														
SAGE CREEK SAOLE	4080	3/08/89	65	21.0	9.5	16.1	SHERWIN	3200	2/28/89	54	17.3	8.3	12.3														
SCHWEITZER BASIN	6090	2/28/89	100	37.8	31.1	40.4	SHERWIN	PILLOW 3200	3/01/89	---	16.1	7.5	11.5														
SCHWEITZER BOWL	4800	2/28/89	72	25.5	18.3	27.2	TWIN LAKES	6510	2/26/89	85	30.6	28.1	36.5														
SCHWEITZER RIDGE	6200	2/28/89	94	35.0	28.5	40.1	WEBB CREEK	4720	2/27/89	35	10.2	5.7	8.8														
SHERWIN	3200	2/28/89	54	17.3	8.3	12.3																					
SHERWIN	PILLOW 3200	3/01/89	---	16.1	7.5	11.5	WEISER, PAYETTE, AND BOISE BASINS							WATERSHED IV													
SKITWISH RIDGE	5110	3/03/89	90	27.2	18.9	30.2	ATLANTA SUMMIT	7600	2/28/89	78	26.8	19.8	30.2														
SUNSET	5540	2/26/89	84	22.7	17.0	28.1	ATLANTA SUM PILLOW	7580	3/01/89	---	24.0	18.1	27.4														
SUNSET	PILLOW 5540	3/01/89	84	25.6	18.0	30.8	ATLANTA TOWNSITE	5370	2/27/89	30	9.6	6.9	---														
TWIN SPIRIT DIVIDE	3480	3/04/89	60	16.4	9.6	12.2	BANNER SUMMIT	7040	2/27/89	61	20.7	15.8	25.8														
WEST TWIN	4220	3/01/89	49	16.9	3.7	8.8	BANNER SUMMIT PILLOW	7040	3/01/89	---	19.5	15.6	23.2														
							BAD BEAR	4940	3/01/89	42	15.2	8.2	13.1														
							BEAR BASIN	5350	2/25/89	53	17.8	11.5	17.6														
							BEAR BASIN	PILLOW 5350	3/01/89	---	17.0	10.6	17.6														
							BEAR SADDLE	6180	3/01/89	80	29.0	13.6	27.9														
							BEAR SADDLE	PILLOW 6180	3/01/89	---	25.9	13.5	27.8														
							BIG CREEK SUMMIT	6580	2/25/89	81	27.9	21.7	31.5														
							BIG CREEK SUM PILLOW	6580	3/01/89	---	25.5	18.3	28.0														
							BOGUS BASIN	6340	3/02/89	76	25.3	12.8	20.9														
							BOGUS BASIN ROAD	5540	3/02/89	37	12.4	1.9	5.8														
							BOULDER CREEK	5440	3/01/89	---	16.5E	12.1	21.1														
							BRUNUAGE MOUNTAIN	7560	2/27/89	---	32.3E	27.1	40.1														
							CAMAS CREEK DIVIOE	5710	2/25/89	47	15.5	6.9	10.6														
							CHIMNEY CREEK	6400	2/25/89	44	14.4	8.0	13.9														
							COUCH SUMMIT	6840	2/25/89	---	15.8E	8.1	16.7														
							COZY COVE	5380	2/27/89	37	11.3	7.8	14.8														
							COZY COVE	PILLOW 5380	3/01/89	---	12.1	---	---														
							CRAWFORD R.S.	4860	2/25/89	31	9.1	4.3	7.4														
							DEAUMAN GULCH	5600	2/28/89	58	19.7	12.3	15.1														
							DEADWOOD AIRSTRIP	5360	2/27/89	---	11.5E	8.0	14.3														
							DEADWOOD SUMMIT	6860	2/27/89	91	32.4	26.9	40.2														
							DOLLARHIDE SUMMIT	8420	2/28/89	58	19.6	13.1	20.9														
							DOLLARHIDE SM PILLOW	8420	3/01/89	---	19.0	13.4	21.3														
							GRAHAM GUARD STATION	5690	2/27/89	36	11.1	9.9	14.9														
							GRAHAM G.S. PILLOW	5690	3/01/89	---	11.4	8.8	16.8														
							IOAHO CITY TOWNSITE	4000	3/01/89	17	6.6	2.1	4.5														
							JACKSON PEAK	7070	2/27/89	66	22.9	16.2	26.8														
							LAKE FORK	5290	2/25/89	44	13.1	7.2	14.3														
							LITTLE CAMAS FLAT	4940	2/25/89	32	9.0	5.1	6.2														
							MANN CREEK	6080	3/01/89	75	25.0	14.1	21.8														
							MOORES CREEK SUMMIT	6100	3/01/89	75	27.4	19.2	28.2														
							MOORES CK SUM PILLOW	6100	3/01/89	---	26.9	20.4	29.6														
							PLACER CREEK	5860	2/28/89	54	15.2	10.0	16.2														
							PRAIRIE	4800	2/26/89	31	9.0	4.6	5.4														
							PRAIRIE	PILLOW 4800	3/01/89	---	5.7	3.4	---														
							ROAD CREEK	5380	2/28/89	30	9.2	6.7	9.2														
							ROBINSON CREEK RIDGE	6220	3/01/89	77	25.8	12.9	18.0														
							ROCK FLAT SUMMIT	5310	3/01/89	---	16.4E	10.4	16.6														
							SECESH SUMMIT	6520	2/27/89	70	25.2	21.0	30.8														
							SECESH SUMMIT PILLOW	6520	3/01/89	---	23.7	21.0	31.2														
							SOLOIER R.S.	5740	2/25/89	41	12.0	6.2	11.6														
							SOLOIER R.S. PILLOW	4330	3/01/89	---	13.2	6.3	---														
							SQUAW FLAT	6240	2/27/89	57	17.9	14.6	22.9														
							SQUAW FLAT	PILLOW 6240	3/01/89	---	16.8	13.6	20.4														
							SQUAW MEADOW	5900	2/27/89	69	24.7	21.2	31.4														
							STURGILL RIDGE	6680	3/01/89	82	27.8	16.3	26.6														
							THORSON CABIN	5320	3/01/89	67	24.4	8.6	13.4														
							TRINITY MOUNTAIN	7770	2/28/89	87	34.0	25.2	37.0														
							TRINITY MTN. PILLOW	7770	3/01/89	---	31.0	23.6	35.7														
							TRIPOD SUMMIT	5260	2/25/89	59	18.6	11.3	16.6														
							VIENNA MINE	8960	2/27/89	78	27.7	19.9	31.2														
							VIENNA MINE	PILLOW 8960	3/01/89	---	22.9	20.2	31.1														

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
BIG WOOD, LITTLE WOOD, BIG LOST, AND LITTLE LOST BASINS							WILLOW, BLACKFOOT, UPPER SNAKE, AND PORTNEUF BASINS						
WATERSHED V							WATERSHED VI						
BEAR CANYON	7900	2/27/89	50	13.8	9.4	15.4	ASPEN GROVE	6500	3/03/89	---	13.0E	8.2	11.0
BEAR CANYON PILLOW	7900	3/01/89	---	12.0	9.1	13.9	AUSTIN BROTHERS RNCH	6400	3/01/89	---	8.6E	5.9	8.6
CAMAS CREEK DIVIDE	5710	2/25/89	47	15.5	6.9	10.6	BEAVERDAM CREEK	6120	2/26/89	28	8.0	5.7	8.3
CHIMNEY CREEK	6400	2/25/89	44	14.4	8.0	13.9	BIG SPRINGS	6400	2/27/89	59	20.2	12.2	18.4
COPPER BASIN	7640	2/27/89	29	7.3	3.9	8.1	BIRCH CREEK	6800	2/28/89	40	12.8	7.5	10.2
COUCH SUMMIT	6840	2/25/89	---	15.8E	8.1	16.7	BLACK BEAR	7950	2/23/89	102	38.6	29.7	35.0
DOLLARHIDE SUMMIT	8420	2/28/89	58	19.6	13.1	20.9	BLACK CANYON	7960	2/28/89	99	32.7	24.7	---
DOLLARHIDE SM PILLOW	8420	3/01/89	---	19.0	13.4	21.3	BLACK MOOSE	8160	2/27/89	---	40.5E	26.6	34.9
DRY FORK	7220	2/27/89	48	13.8	8.0	14.4	BLUE LEDGE MINE	6900	3/01/89	---	18.8E	9.5	14.3
FISHPOLE LAKE	9300	2/27/89	47	15.8	12.3	17.0	BLUE RIDGE	6780	2/28/89	63	22.7	12.2	16.9
GALENA	7440	3/01/89	---	13.6E	8.8	16.6	BONE	6200	2/28/89	27	9.3	5.2	7.3
GALENA PILLOW	7440	3/01/89	---	12.9	10.1	16.4	BROCKMAN STATION	6430	2/28/89	42	13.1	7.5	9.7
GALENA NEW	7470	3/01/89	52	15.0	9.5	18.3	CAMP CREEK	6580	3/01/89	37	10.4	5.0	9.2
GALENA SUMMIT	8780	3/01/89	53	14.9	12.1	20.2	COULTER CREEK	7020	2/24/89	58	17.3	15.6	19.9
GALENA SUMMIT PILLOW	8780	3/01/89	---	13.9	11.6	16.2	COLD SPRINGS	7000	2/25/89	64	21.9	13.3	20.3
GARFIELD R.S.	6560	2/27/89	35	9.4	4.9	9.9	CRAB CREEK	6860	2/28/89	54	16.8	8.5	13.9
GARFIELD R.S. PILLOW	6560	3/01/89	---	9.5	5.5	9.9	CRAB CREEK PILLOW	6860	3/01/89	---	17.1	8.9	14.4
GRAHAM RANCH	6270	3/01/89	44	11.7	5.7	12.6	EAST CREEK	7000	2/26/89	38	10.9	8.2	9.9
HILTS CREEK	8000	2/27/89	38	9.3	6.6	9.4	FALL CREEK	6820	2/28/89	36	11.0	4.7	8.8
HILTS CREEK PILLOW	8000	3/01/89	---	10.3	9.7	11.3	GRASSY LAKE	7270	2/27/89	91	31.9	26.9	30.3
HYNDMAN CREEK	7440	2/27/89	44	11.3	7.7	12.7	GRASSY LAKE PILLOW	7270	3/01/89	---	29.4	24.0	31.0
HYNDMAN PILLOW	7440	3/01/89	---	10.5	8.3	11.4	INDIAN MEADOWS	9420	2/28/89	96	32.8	28.0	31.9
IRON 80C	7650	2/24/89	44	10.0	7.3	12.4	IRVING CREEK	7040	2/27/89	22	6.1	4.2	4.9
IRON MINE CREEK	6300	2/27/89	40	10.6	5.0	10.1	ISLAND PARK	6290	2/27/89	58	18.7	10.0	15.2
LEADBELT	6700	2/24/89	32	7.4	3.8	8.5	ISLAND PARK PILLOW	6290	3/01/89	---	15.7	10.6	14.7
LITTLE CAMAS FLAT	4940	2/25/89	32	9.0	5.1	6.2	JACKPINE CREEK	7350	2/28/89	62	19.4	15.3	19.8
LDST-WOOD DIVIDE	7900	2/27/89	59	18.0	13.4	19.8	JOHNSON CREEK	6730	2/27/89	36	10.9	9.2	12.0
LOST-WOOD DVD PILLOW	7900	3/01/89	---	17.2	12.6	20.5	KILGORE	6320	2/26/89	42	13.1	6.8	10.7
MASCOT MINE	7780	3/01/89	---	11.3E	6.2	12.9	LATHAM SPRINGS	7630	2/28/89	93	32.6	23.5	28.9
MOONSHINE	7440	2/28/89	35	8.6	6.6	9.0	LAVA CREEK	7350	2/28/89	56	18.0	9.8	14.0
MOONSHINE PILLOW	7440	3/01/89	---	8.5	7.4	9.4	LOWER PEBBLE	5780	2/25/89	40	12.3	9.8	12.1
MOUNT BALDY	8920	2/27/89	55	16.8	10.7	18.1	LUCKY DOG	6860	2/28/89	76	26.2	17.9	27.9
MULDOON	6320	2/27/89	23	6.0	3.7	7.4	MADISON PLATEAU	7750	2/23/89	72	25.7	16.7	19.3
SAWMILL CANYON	7000	2/28/89	27	6.2	5.2	7.0	MC RENOLDS RESERVOIR	6720	2/28/89	52	15.9	11.3	17.4
SOLDIER R.S.	5740	2/25/89	41	12.0	6.2	11.6	MINK CREEK	6410	2/25/89	57	16.5	9.7	16.0
SOLDIER R.S. PILLOW	4330	3/01/89	---	13.2	6.3	---	MUD CREEK	7100	3/03/89	87	26.8	13.4	16.9
STICKNEY MILL	7430	2/27/89	31	7.5	3.9	8.2	NORTH PUTNAM	7240	2/28/89	71	24.3	---	25.5
STICKNEY MILL PILLOW	7430	3/01/89	---	6.5	3.2	7.5	PACKSADDLE SPRING	8200	2/28/89	78	29.1	19.7	24.7
SWEDE PEAK	7640	2/27/89	53	15.5	8.3	15.2	PEBBLE CREEK	6550	2/25/89	45	15.0	9.1	14.4
SWEDE PEAK PILLOW	7640	3/01/89	---	14.3	8.3	13.4	PHILLIPS BENCH	8200	2/27/89	81	26.4	19.7	25.5
TELFER RANCH	5840	2/27/89	33	9.8	3.6	7.9	PHILLIPS BENCH PILL.	8200	3/01/89	---	25.8	17.6	23.7
VIENNA MINE	8960	2/27/89	78	27.7	19.9	31.2	PINE CREEK PASS	6810	2/28/89	50	15.8	13.2	15.4
VIENNA MINE PILLOW	8960	3/01/89	---	22.9	20.2	31.1	PUTNAM	7220	2/25/89	59	21.2	8.5	18.5
WET CREEK SUMMIT	7680	2/27/89	38	9.6	8.7	10.0	SAWTELL MOUNTAIN	8720	2/27/89	93	34.5	22.7	28.8
							SEDGWICK PEAK	7850	2/26/89	50	16.8	10.4	16.0
							SHEEP MOUNTAIN	6570	3/03/89	51	14.6	8.4	12.0
							SHEEP MTN PILLOW	6570	3/01/89	---	16.1	9.2	13.8
							SLUG CREEK DIVIDE	7230	2/27/89	40	11.9	9.8	14.7
							SLUG CK DVD PILLOW	7230	3/01/89	---	12.4	10.9	16.7
							SOMSEN RANCH	6840	3/01/89	45	13.8	9.7	12.9
							SOMSEN RANCH PILLOW	6800	3/01/89	---	11.4	7.6	12.4
							STATE LINE	6660	2/28/89	44	13.3	11.1	12.7
							SULPHUR PEAK	7070	2/27/89	---	12.4E	10.1	14.2
							TARGHEE PASS	6980	2/27/89	---	14.9E	8.5	12.9
							TETON PASS W.S.	7740	2/27/89	79	27.4	17.0	22.4
							TEX CREEK	6650	2/28/89	---	10.3E	6.1	8.6
							TOPONCE	6160	2/25/89	48	15.2	11.6	14.6
							TWITCHELL CANYON	6300	2/28/89	52	18.8	11.2	14.4
							VALLEY VIEW	6680	2/27/89	53	16.7	9.4	14.8
							WEBBER CREEK	6700	2/27/89	26	6.5	3.8	4.8
							WHISKEY CREEK	6800	2/23/89	67	22.5	11.6	17.7
							WHITE ELEPHANT	7710	2/27/89	72	24.9	15.9	21.5
							WHITE ELEPHANT PILL	7710	3/01/89	---	26.7	17.2	22.6
							WILDHORSE DIVIDE	6490	2/25/89	52	16.6	9.1	15.0
							WILDHORSE UVD PILLOW	6490	3/01/89	---	16.8	9.0	14.2
							WOOD CANYON DIVIDE	7450	2/27/89	---	15.1E	10.3	16.4

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
SOUTHSIOE SNAKE BASIN							WATERSHEO VII						
ANTELOPE RIOGE	6180	2/26/89	29	9.9	3.3	6.8	GREAT BASIN						
BAOGER GULCH	6660	2/27/89	43	14.8	7.8	11.3	CHRISTENSEN RANCH	5560	2/21/89	40	9.8	--	8.5
BEAR CREEK	7800	2/27/89	64	22.9	13.2	18.2	CLIFF CANYON	7200	2/21/89	30	7.4	3.3	8.7
BEAR CK SNOTEL	7800	3/01/89	---	21.0	13.0	18.1	CUB RIVER R.S.	5450	2/21/89	39	9.9	6.3	8.6
BIG BEND	6700	2/27/89	33	10.2	7.2	8.0	DANIELS CREEK	6270	2/21/89	31	7.4	4.0	5.9
BOSTETTER R.S.	7500	2/27/89	52	18.1	12.6	17.8	ORY BASIN	7820	2/21/89	69	21.3	15.9	24.9
BOSTETTER RS PILLOW	7500	3/01/89	---	18.1	9.8	16.0	ORY CREEK FLAT	6360	2/21/89	34	9.5	5.9	7.9
BOY SCOUT CAMP	7740	2/27/89	45	14.2	10.4	13.4	EMIGRANT SUMMIT	7390	2/27/89	59	19.7	14.6	21.9
CEGAR CREEK	6820	2/27/89	34	11.2	6.8	9.4	EMIGRANT SUM PILLOW	7390	3/01/89	---	17.6	12.6	25.3
CLEAR CREEK MEADOWS	9420	2/27/89	62	20.7	13.6	19.3	EMIGRATION CANYON	6500	2/27/89	34	9.8	7.7	9.9
COLUMBIA BASIN AM	6650	2/28/89	31	9.9	5.9	8.4	FRANKLIN BASIN	8020	2/21/89	63	20.0	13.8	21.7
OEAO LINE	7400	2/27/89	48	17.5	9.5	19.1	FRANKLIN BSN PILLOW	8040	3/01/89	---	22.2	15.3	26.3
OEAO LINE SOUTH	7450	2/27/89	50	18.9	11.9	21.1	GIVEOUT	6860	2/28/89	38	10.3	9.4	11.0
FAWN CREEK AM	7050	2/27/89	49	15.7	--	7.9	GIVEOUT PILLOW	6840	3/01/89	---	9.9	9.8	11.8
FOX CREEK	6800	2/27/89	32	11.1	8.4	9.9	GIVEOUT NEW	6930	2/28/89	33	9.0	9.2	9.9
FRY CANYON	6700	2/27/89	25	7.5	6.6	6.7	LIBERTY SPRING	8600	2/21/89	96	32.2	22.3	33.2
GEORGE CREEK	8840	2/27/89	59	19.1	12.2	18.1	LITTLE BEAVER	6790	3/01/89	---	12.0E	10.8	13.8
GOAT CREEK	8800	2/27/89	48	15.6	11.5	16.0	LOWER ELKHORN	6960	2/21/89	43	12.3	6.6	13.1
GOL CREEK	6600	2/27/89	23	6.6	4.4	5.2	LOWER HOME CANYON	7640	2/27/89	---	11.0E	8.9	12.0
HOWELL CANYON	7980	2/27/89	69	25.1	16.6	22.9	MONTPELIER CREEK	6540	3/01/89	---	7.0E	6.2	7.7
HOWELL CANYON PILLOW	7980	3/01/89	---	22.1	13.3	19.0	OXFORD MOUNTAIN	6800	2/21/89	44	13.4	6.1	9.7
HUMMINGBIRD SPRINGS	8950	2/27/89	65	21.0	15.6	20.2	OXFORD SPRING	6740	2/21/89	44	12.5	6.1	10.8
INDIAN GROVE	7560	2/27/89	38	11.5	5.6	11.1	OXFORD SPRING PILLOW	6740	3/01/89	---	11.8	6.1	12.7
JACK CREEK, LOWER	6800	2/27/89	15	5.0	5.4	4.6	STRAWBERRY CREEK	5820	2/27/89	39	13.0	7.4	10.2
JACKS PEAK	8420	2/27/89	73	23.7	16.3	20.3	STRAWBERRY-MINK DVD	6720	2/21/89	66	20.7	14.2	19.0
LANGFORD FLAT CREEK	5980	2/27/89	25	8.4	5.8	5.8	UPPER ELKHORN	7140	2/21/89	50	14.9	9.6	16.4
LAUREL ORAW	6700	2/27/89	32	10.4	6.3	7.7	UPPER HOME CANYON	8560	2/27/89	59	18.3	13.6	20.4
LOGGER SPRINGS	8120	2/27/89	50	15.5	11.0	16.5	WILLOW FLAT	6070	2/21/89	59	17.5	10.5	14.3
MAGIC MOUNTAIN	6880	2/27/89	52	17.9	11.8	16.9	WORM CREEK	6620	2/21/89	61	17.6	10.6	17.0
MAGIC MTN PILLOW	6880	3/01/89	---	19.6	11.5	16.9							
MERRIT MOUNTAIN AM	7000	2/28/89	34	10.5	3.4	5.2							
MUD FLAT	5730	2/26/89	27	8.9	4.2	6.1							
MUD FLAT PILLOW	5730	3/01/89	---	8.3	3.6	5.8							
ONE MILE SUMMIT	7330	2/27/89	12	3.3	3.0	6.0							
POLE CREEK R.S.	8330	2/27/89	51	17.1	14.6	17.4							
ROOEO FLAT	6800	2/27/89	26	8.0	5.4	5.9							
SEVENTYSIX CREEK	7100	2/27/89	35	11.2	7.2	11.3							
SEVENTYSIX CK SNOTEL	7100	3/01/89	---	10.8	5.4	9.5							
SHOSHONE BASIN	5810	2/27/89	---	7.9E	5.6	5.5							
SILVER CITY	6400	2/28/89	55	20.3	10.7	14.1							
SOUTH MOUNTAIN	6500	2/26/89	54	20.6	10.2	12.6							
SOUTH MTN PILLOW	6500	3/01/89	---	28.9	10.7	12.2							
SUBLETT	5950	2/28/89	36	10.4	6.5	10.5							
TAYLOR CANYON	6200	2/27/89	25	8.1	4.2	5.0							
TOE JAM AM	7700	2/28/89	34	11.2	7.8	9.2							
VIPOINT	7670	2/27/89	43	13.0	8.1	13.4							
WILSON CREEK	7500	2/27/89	46	15.5	8.5	11.4							

The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State	Idaho Department of Water Resources Soil and Water Conservation Districts of Idaho
Federal	U.S. Department of Agriculture Forest Service U.S. Department of Army Corps of Engineers U.S. Department of Commerce NOAA, National Weather Service U.S. Department of Interior Bureau of Reclamation Geological Survey, Water Resources Division Shoshone-Bannock Tribal Council
Local	Big Lost River Irrigation District Big Wood Irrigation Company Boise Project Board of Control Idaho Water District #01 Lewiston Orchards Irrigation District Little Wood River Irrigation District North Board of Control — Owyhee Project Salmon Falls Irrigation Company South Board of Control — Owyhee Project
Private	Cyprus Mining Company FMC Corporation Idaho Power Company Le Bois Resort Washington Water Power Company
	Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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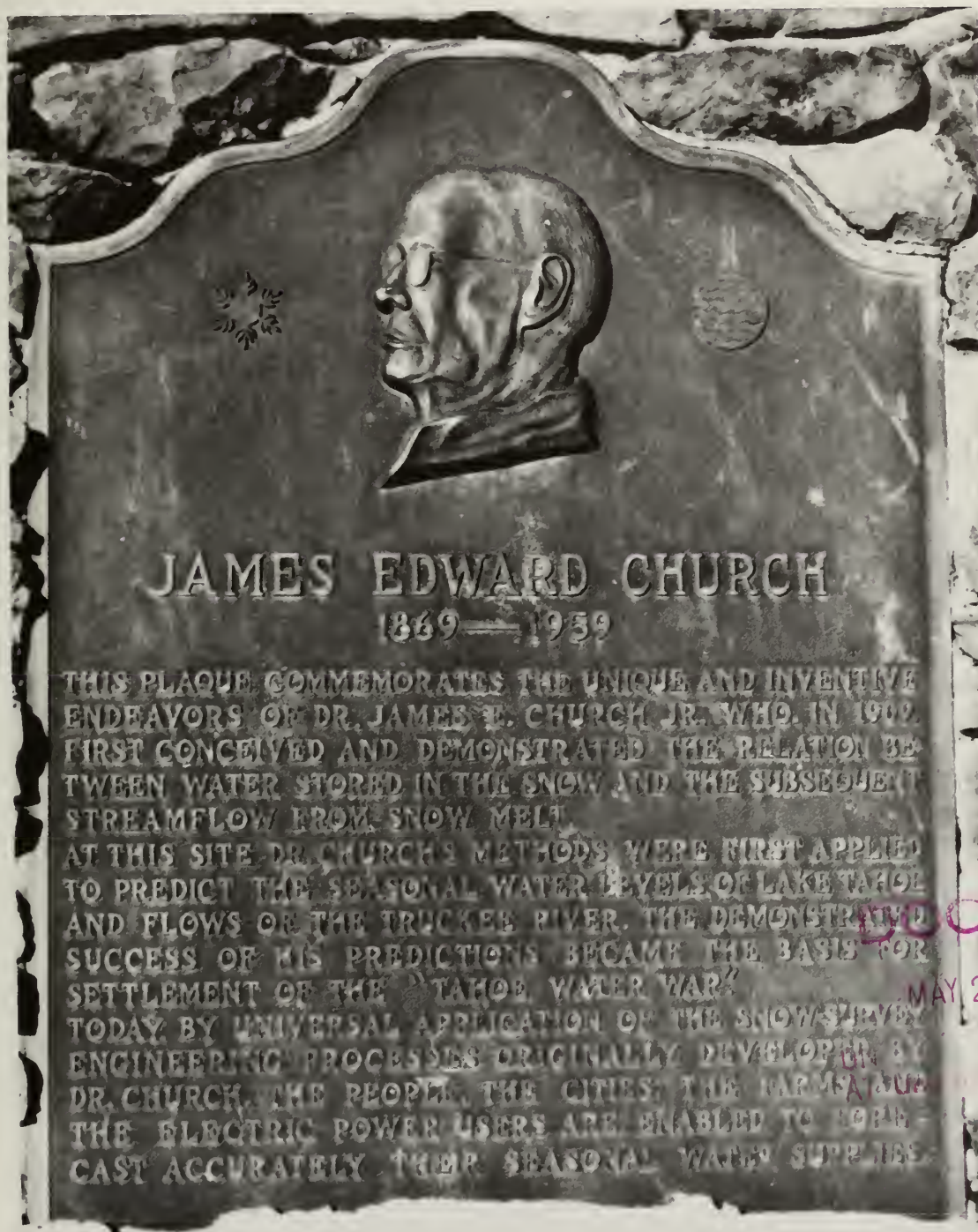
Soil
Conservation
Service

Boise,
Idaho



Idaho Water Supply Outlook

April 1, 1989



Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Soil Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

An error is associated with each forecast, and this error decreases as the season progresses and more data becomes available. To express the range of error that can be expected, "most probable" forecasts are issued along with a range representing a "reasonable minimum" and a "reasonable maximum". Actual streamflow can be expected to fall within this range in eight out of ten years. Additionally two specific scenarios are provided based on the assumption that subsequent precipitation will be "wet", above average, or "dry", below average.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola Ave., Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Building A, 3rd floor, Denver, CO 80211
Idaho	3244 Elder Street, Room 124, Boise, ID 83705
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 87102-3157
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97204
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	W. 920 Riverside, Room 360, Spokane, WA 99201-1080
Wyoming	Federal Building, 100 "B" Street, Room 3124, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209-3489.

Water supply reports published by other agencies:

California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Idaho Water Supply Outlook

and

Federal — State — Private Cooperative Snow Surveys

Issued by

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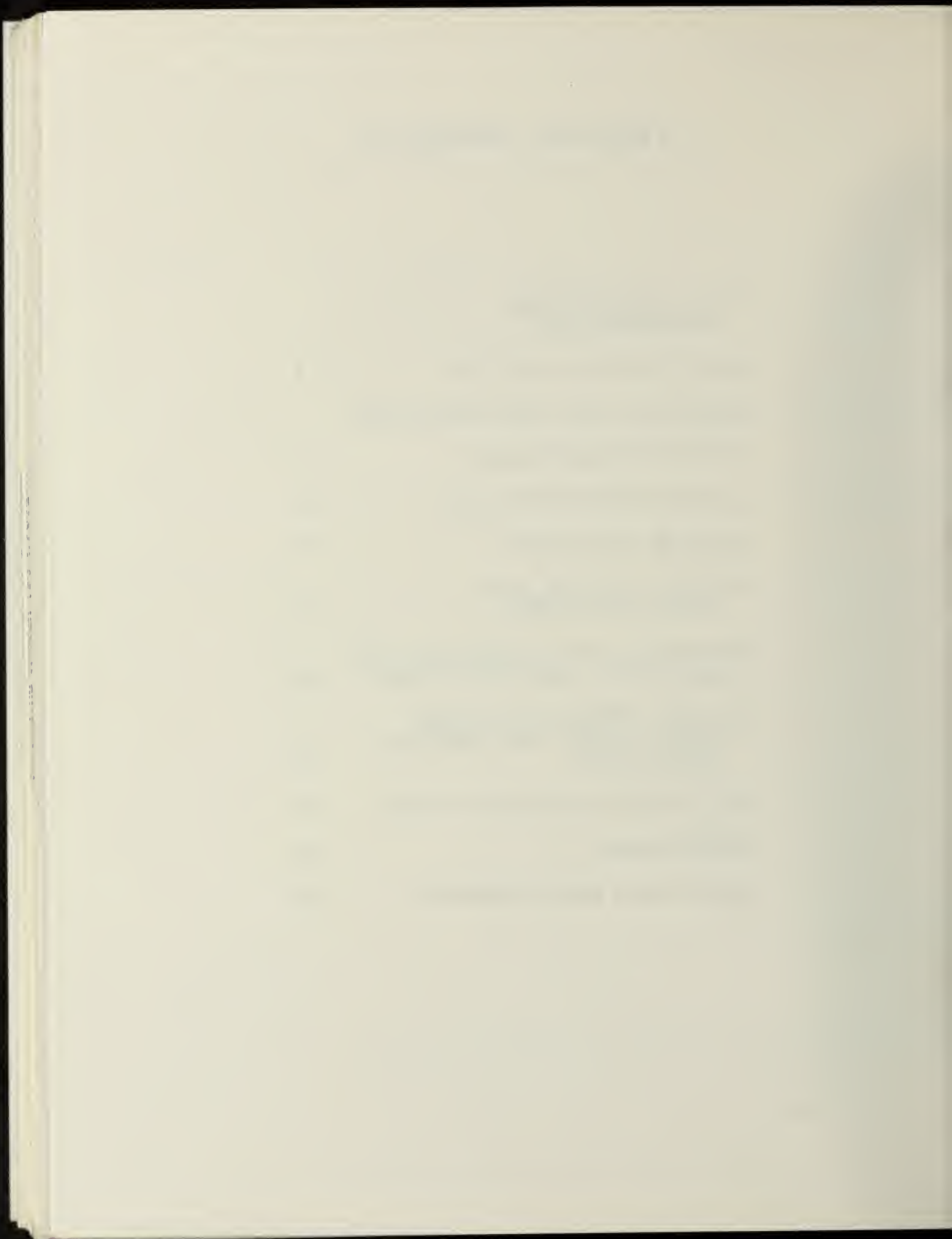
COVER: This plaque on the outlet gate at Lake Tahoe, Nevada,
commemorates the start of snow surveys in 1909.

"Programs and assistance of the United States Department of Agriculture are
available without regard to race, creed, color, sex, age, or national origin."

1868-1869

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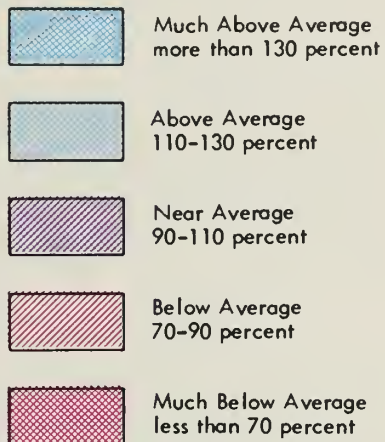


STREAMFLOW PROSPECTS IDAHO

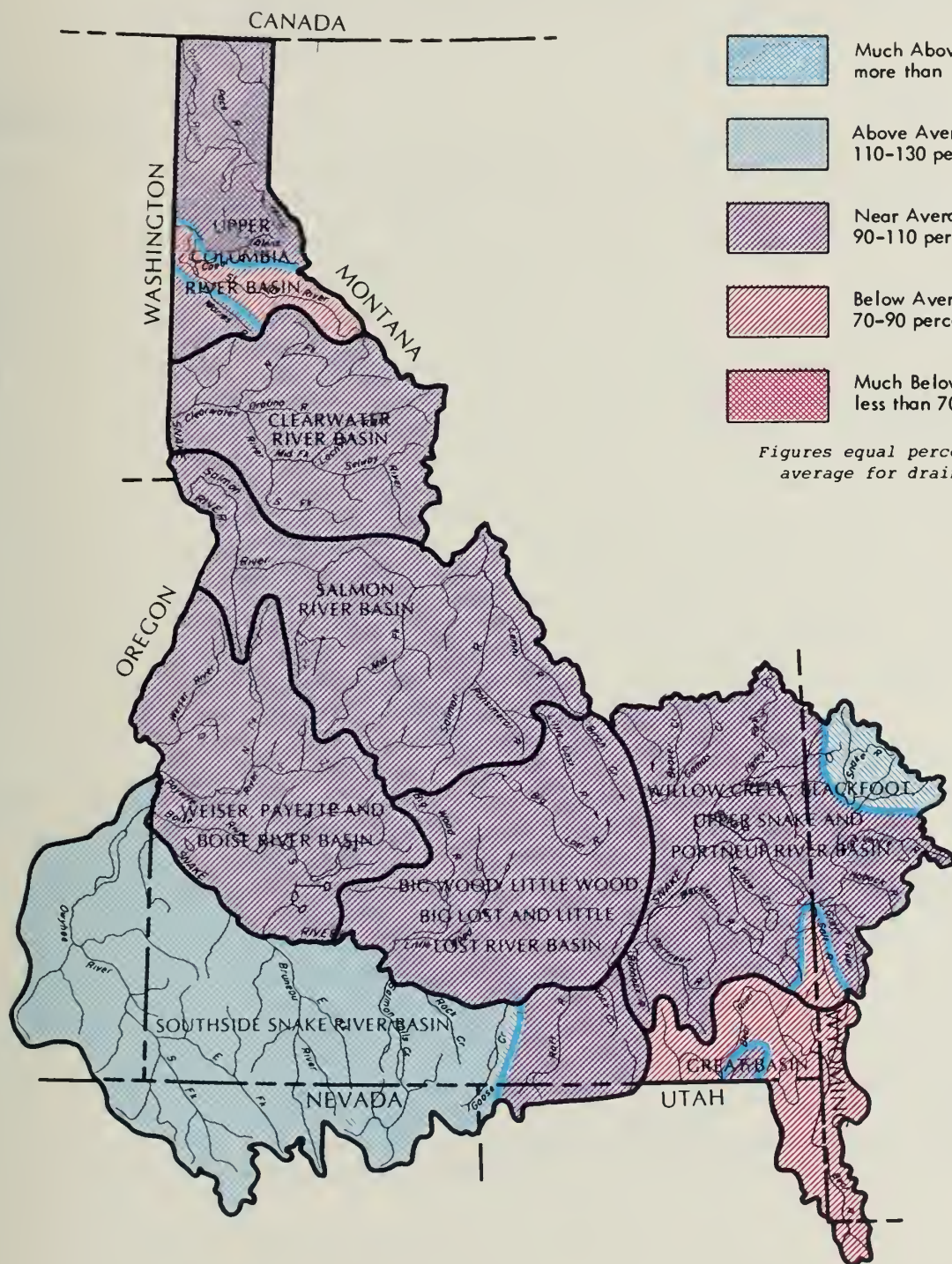
0 25 50 75 100 MI

0 50 100 150 KM

LEGEND



Figures equal percent of
average for drainage.





GENERAL OUTLOOK

SUMMARY:

ABUNDANT PRECIPITATION DURING MARCH HAS IMPROVED IDAHO'S MOUNTAIN SNOWPACK FOR APRIL 1, PROMISING ADEQUATE WATER SUPPLIES FOR MOST AREAS OF THE STATE. THE TIMING OF THE SNOWPACK MELTOUT AND THE AMOUNT AND TIMING OF SPRING AND SUMMER RAINFALL ARE THE ONLY REMAINING UNKNOWN IN IDAHO'S 1989 WATER SUPPLY PICTURE.

SNOWPACK:

Idaho's mountain snowpack shows improvement across much of the state as a result of a very wet March. April 1 snowpack figures continue to hover around normal, ranging from 85 to 127% of average statewide. North Idaho snowpacks are reported to be near normal, ranging from a low of 93% of normal on the St. Joe River basin to 103% on the Selway drainage. Exceptions to this are in the low elevations near Coeur d'Alene and Moscow where snowpacks remain well above normal. In central Idaho, snowpacks are near or slightly above normal, ranging from 92% of average on the Little Wood River to 112% on the Boise basin. Again, exceptions are found in the lower elevations where snowpacks are above to well above average. In eastern Idaho and western Wyoming, snow conditions range from 83% of normal on the Salt River to 119% on the Willow Creek basin. Basins on the south side of the Snake report above normal snowpacks, ranging from 102% on the Raft River to 138% on the Owyhee basin. Snowpacks in the Great Basin remain slightly below average, ranging from 85 to 99% of normal.

RESERVOIRS:

A combination of abundant precipitation and low elevation snowmelt produced near to above average streamflows over much of the state during March. As a result, most reservoir storage levels show good improvement for the month. Twenty-seven key reservoirs across the state now report a combined storage of 88% of average and 58% of capacity, ranging from a low of 27% of average in Jackson Lake to 144% in Brownlee Reservoir. Most reservoirs report between 60 and 120% of normal storage. Current storage levels coupled with Apr-July streamflow forecasts indicate nearly all major reservoir systems in the state will fill to capacity.

PRECIPITATION:

Valley precipitation stations indicate all areas of the state received above to well above normal amounts of moisture during March, with the state as a whole showing 195% of normal. The lowest totals were found in Dixie and Salmon which reported 105% and 109% of average respectively. Stations in the Snake River Plain in south central and southwestern Idaho reported the highest amounts with Burley at 371%, Twin Falls at 337%, and Boise at 336% of normal accumulations for the month. In general terms, the northern third of the state received 150 to 200% of average precipitation, except Porthill which reported 119%. Central Idaho received 150 to 180% while southern Idaho received 200 to over 350%. Amounts in extreme southeastern Idaho ranged from 130 to 170%.

Temperatures were generally a little above normal for the month. Salmon recorded a departure from average of plus 4.4 degrees and Lewiston a plus 3.4 degrees. There was a brief cold outbreak the first few days of March followed by an unusually warm spell the 8th through the 12th of the month. The remainder of March brought near normal temperatures.

STREAMFLOW:

Streamflow forecasts show a slight improvement over those issued a month ago and now range from slightly below to slightly above average throughout the state. North and central Idaho streamflows are forecast to be near normal, ranging from 89% on the Spokane River to 102% on the Boise and Weiser Rivers. Eastern Idaho streams are expected to yield near to slightly above average streamflow volumes for the season, ranging from 103% on the Portneuf to 118% for the Snake near Moran. Basins on the southside of the Snake are forecast to produce above normal flows, ranging from 113 to 120% of average. Streamflow projections in the Bear River basin remain below normal, ranging from 66% for the Bear River to 91% on the Cub River. Generally speaking, the 1989 irrigation water supply is expected to be good throughout the state. Minor shortages may be experienced in areas of extreme southeastern Idaho where forecasts are below normal. Supplies on the Oakley and Salmon Falls Reservoir systems may also fall short of full allotments but will be much improved over the 1988 supplies.

RECREATIONAL OUTLOOK:

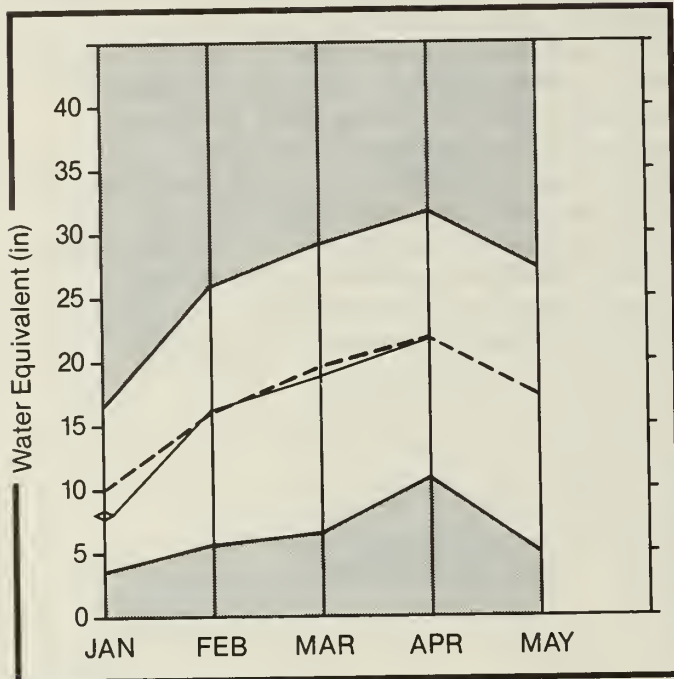
While above normal precipitation in March dampened the spirits of many early season recreationists, the augmented snowpack virtually guarantees a good boating season. Central Idaho watersheds such as the Salmon and Selway showed significant gains in snowpack. The timing and length of the runoff season will be determined by temperatures and additional precipitation. As usual, the Owyhee and Bruneau Rivers lost some snowpack in March. However, the boating should remain good into May on the Owyhee and possibly into June on the Bruneau. Peak runoff on central Idaho streams can be expected in the mid-May to mid-June period. Variable weather and runoff conditions will necessitate an extra degree of safety planning to insure an enjoyable spring outdoor recreation season.

SOIL MOISTURE:

Heavy rainfall in March coupled with snowmelt in the lower elevations has significantly improved soil moisture conditions in the valleys and lower mountain areas of the state. Soils in these areas now have above normal moisture contents. Precipitation in the higher elevations continued to fall in the form of snow and most mountain soils remain dry. The degree of snowmelt water loss into the soils will depend largely on the weather conditions during the melt period. An early, prolonged melt season would produce low melt rates and allow much of the snowmelt to infiltrate the soil mantle. On the other hand, if the melt season is delayed into late spring, the higher probability of warm temperatures should provide melt rates exceeding the soil's infiltration capacity, consequently generating more runoff.

Upper Columbia Basin

Mountain snowpack* (inches)



*Based on selected stations

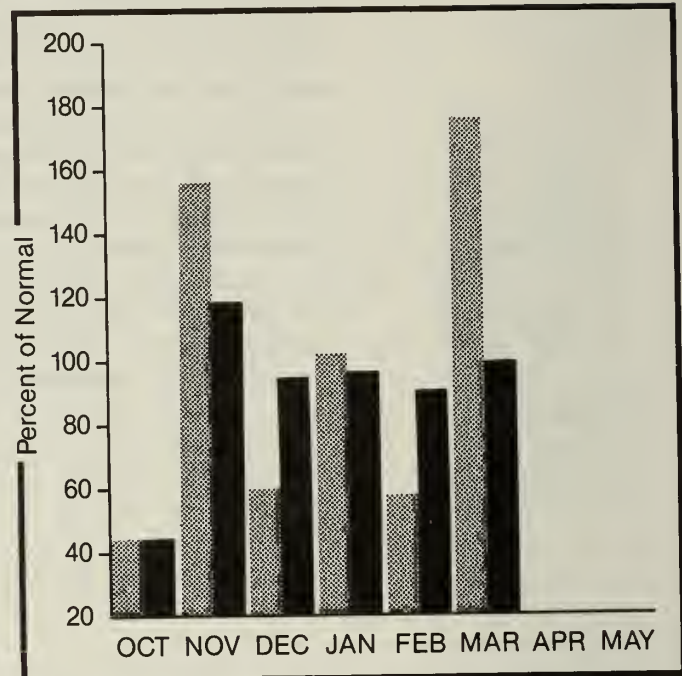
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

April 1 snowpack conditions have improved slightly from the March 1 figures and are now near normal, ranging from 93 to 99 percent of average on all major river basins. The lower elevations in the Coeur d'Alene and Moscow areas continue to report much above normal snowpacks. The Hayden Lake and Palouse River basins report 162 and 167% of normal snowpacks, respectively. Spring runoff in these low elevation basins is expected to be well above normal. Elsewhere, Apr-Sept streamflows are forecast to be near or slightly below normal, ranging from 89% for the Spokane River to 97% for Pend Oreille Lake inflow. Abundant precipitation along with low elevation snowmelt during March has produced good streamflow volumes, and reservoir storage levels now range from 69 to 118% of average.

UPPER COLUMBIA RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
KOOTENAI at Leonia (2)	APR-SEP	7990	95			9510	6390	8441
	APR-JUL	6950	95			8270	5560	7340
	APR-JUN	5600	95			6660	4480	5899
CLARK FORK at Whitehorse Rapids (2)	APR-SEP	13000	97			15700	10300	13370
	APR-JUL	11800	97			14200	9370	12150
	APR-JUN	10000	97			12100	7930	10360
PEND OREILLE LAKE inflow (2)	APR-SEP	14500	97			17500	11700	14930
	APR-JUL	13200	97			15900	10600	13650
	APR-JUN	11400	97			13800	9280	11780
PRIEST nr Priest River (2)	APR-SEP	860	96			1080	645	893
	APR-JUL	805	96			1010	610	838
COEUR D'ALENE at Enaville	APR-SEP	760	92			1010	520	830
	APR-JUL	725	92			960	495	789
SPOKANE nr Post Falls (2)	APR-SEP	2510	89	2790	2230	3190	1830	2820
	APR-JUL	2420	89	2750	2090	3070	1770	2723
ST. JOE at Calder	APR-SEP	1160	91	1250	1070	1420	905	1281
	APR-JUL	1090	90	1200	980	1330	850	1211

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
HUNGRY HORSE	3451.0	1128.0	843.0	2098.0	Kootenai ab Bonners Ferry	52	127	94
FLATHEAD LAKE	1791.0	675.0	868.0	753.0	Movie River	3	131	97
PEND OREILLE	1561.2	562.1	536.0	813.7	Pend Oreille River	165	128	99
NOXON RAPIDS	335.0	304.3	306.3	213.6	Clark Fork River	114	124	96
COEUR D'ALENE	291.2	243.2	194.2	234.3	Priest River	7	125	94
PRIEST LAKE	97.7	46.8	42.8	39.8	Rathdrum Creek	0	0	0
					Hayden Lake	3	265	162
					Coeur d'Alene River	9	146	96
					St. Joe River	10	120	93
					Spokane River	22	134	98
					Palouse River	2	544	190

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.

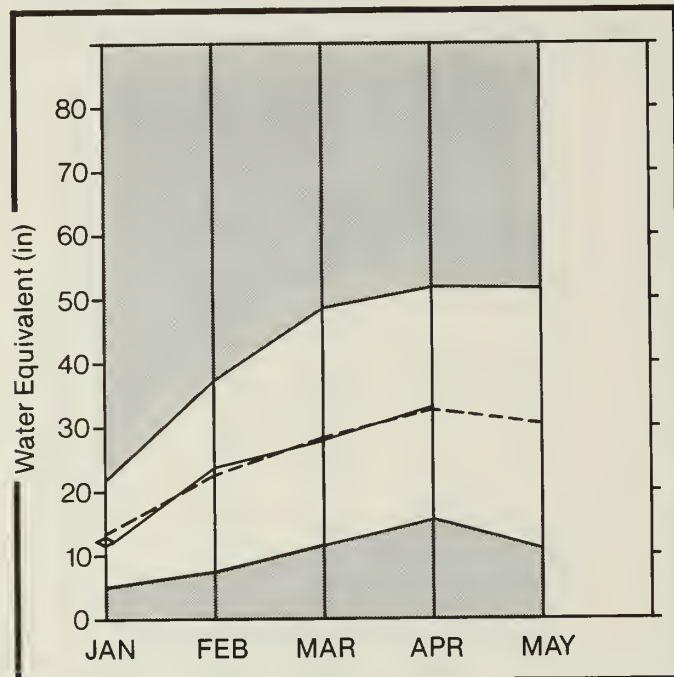
REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.

(1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.

(2) - Corrected for upstream diversions or changes in reservoir storage.

Clearwater River Basin

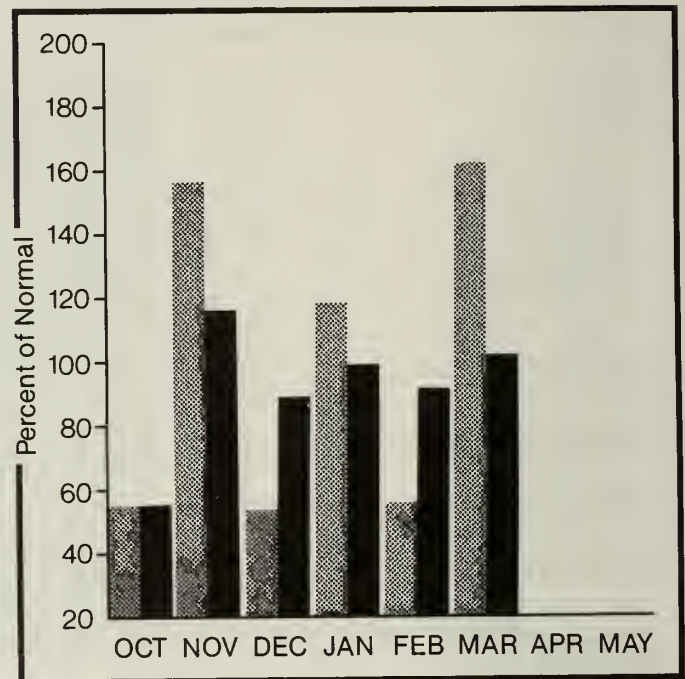
Mountain snowpack* (inches)



*Based on selected stations

Maximum ——— Average - - - - -
Minimum ——— Current ◇ ———

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation [hatched bar] Year to date precipitation [solid black bar]

WATER SUPPLY OUTLOOK:

Snowpack conditions on the Clearwater basin show a good improvement from the March 1 figures and are now near normal. Basin snowpacks range from 96% of normal on the North Fork Clearwater to 103% on the Selway. Low elevation snow courses in the Moscow, Bovill, and Pierce areas however, report above average snowpacks ranging from 125 to 160% of normal. Low elevation tributaries draining these areas are expected to produce above normal flows, while the North Fork and Clearwater mainstem are forecast to yield near normal volumes. Dworshak Reservoir storage also improved during March and is currently very near normal for April 1.

For more information contact your local Soil Conservation Service office.

CLEARWATER RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
DWORSHAK RESERVOIR inflow	APR-SEP	2820	94			3480	2160	3010
	APR-JUL	2650	94			3270	2030	2822
CLEARWATER at Orofino	APR-SEP	4940	96			6280	3600	5163
	APR-JUL	4690	96			5960	3420	4889
CLEARWATER at Spalding	APR-SEP	7970	95			9900	6130	8378
	APR-JUL	7560	96			9380	5820	7916

RESERVOIR STORAGE

(1000AF)

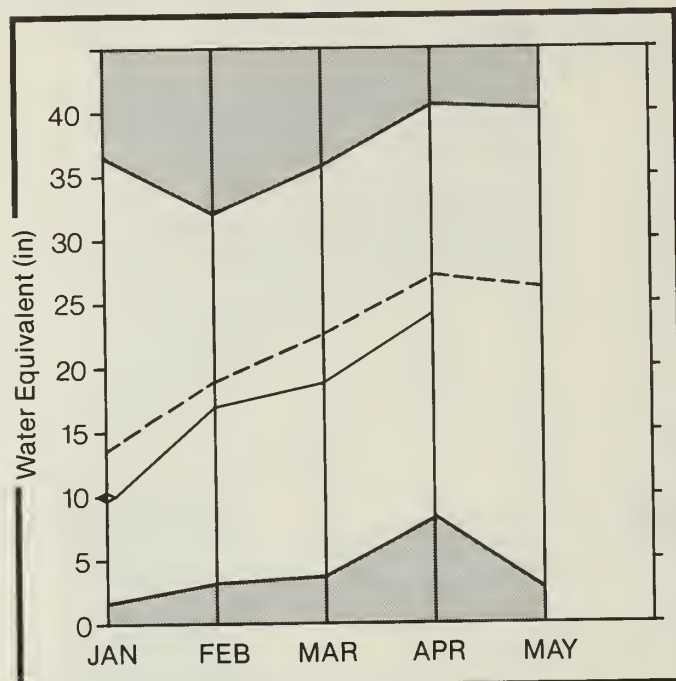
WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
DWORSHAK	3467.8	1990.3	1955.1	1996.2	North Fork Clearwater	15	130	96
					Lochsa River	6	115	102
					Selway River	8	117	103
					Clearwater River	25	126	98

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.
 REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.
 (1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.
 (2) - Corrected for upstream diversions or changes in reservoir storage.

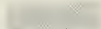
Salmon River Basin

Mountain snowpack* (inches)



*Based on selected stations

Maximum



Average



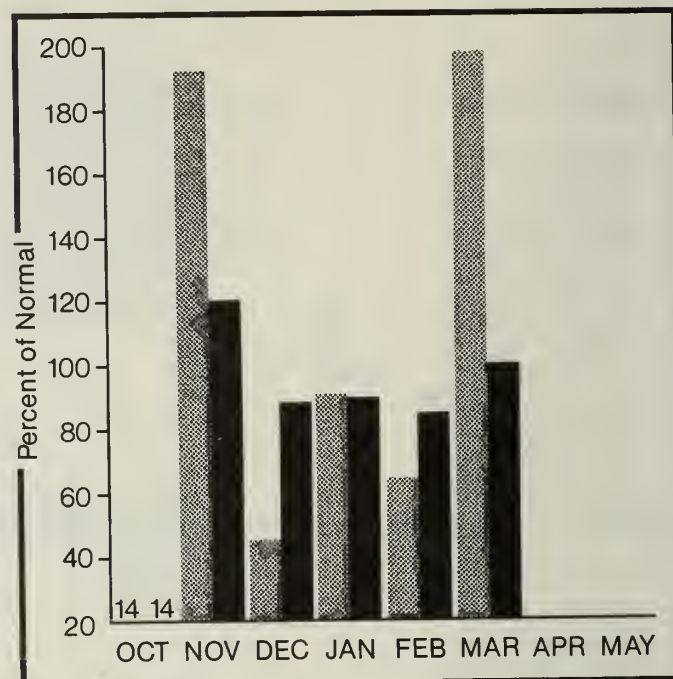
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

March brought much above normal precipitation to the basin with most mountain SNOTEL stations reporting twice their normal amounts for the month. Basin snowpack conditions show a good improvement over the March 1 figures but remain slightly below average, ranging from 91 to 95% of normal. Apr-Sept streamflow volumes are expected to be just slightly below normal and should provide excellent flows for whitewater boating and other recreational uses this spring and summer.

For more information contact your local Soil Conservation Service office.

SALMON RIVER BASIN

STREAMFLOW FORECASTS

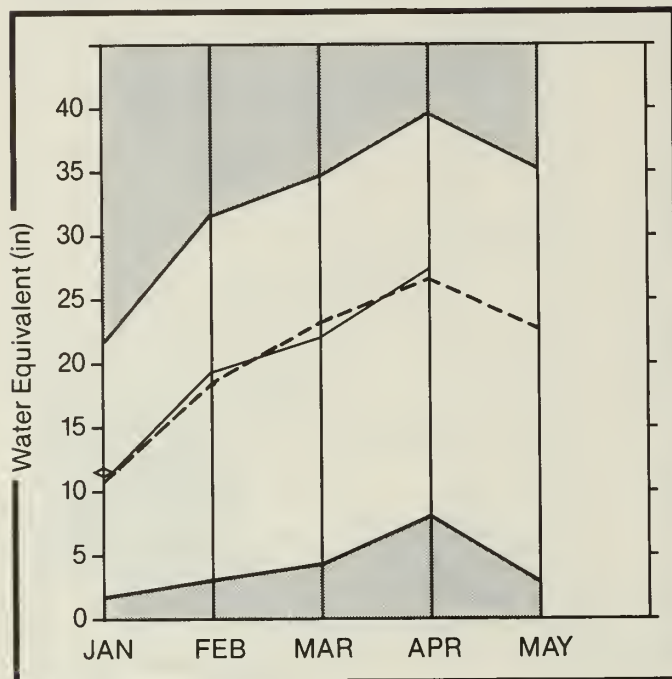
FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
SALMON at Salmon	APR-SEP	980	91			1340	625	1077
	APR-JUL	835	91			1140	530	919
SALMON at White Bird	APR-SEP	6520	93			8060	4980	7007
	APR-JUL	5880	93			7270	4490	6322

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	USEABLE STORAGE	THIS YEAR	LAST YEAR	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
		**					
				AVG.			
					Salmon River ab Salmon	13	144 95
					Lemhi River	12	114 91
					Salmon River Total	36	136 94

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.
 REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.
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 (2) - Corrected for upstream diversions or changes in reservoir storage.

Weiser, Payette, and Boise River Basin

Mountain snowpack* (inches)

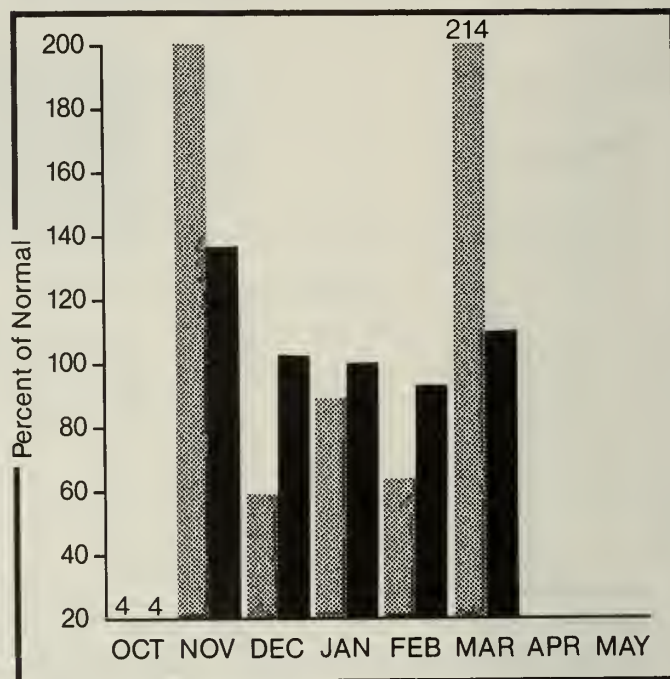


*Based on selected stations


Maximum —
Minimum —


Average - - -
Current \diamond —

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation 

Year to date precipitation 

WATER SUPPLY OUTLOOK:

Much above normal precipitation during March brought good improvements to basin snowpack conditions, with most basins showing a 5 to 12% increase in comparison to normal. April 1 snowpacks are generally near to slightly above normal, ranging from 97% of average on the North Fork of the Payette basin to 112% on the Boise basin. Exceptions are found on the Mann Creek drainage near Weiser and the Canyon Creek drainage near Mountain Home which report 127% and 168% of normal snowpacks, respectively. Apr-Sept streamflow volumes are forecast to be near normal, ranging from 98 to 102%. Reservoir carryover storage levels are near to below normal on all major reservoirs except Cascade Reservoir which reports above average storage at 120%. Water supplies for the 1989 irrigation season are expected to be adequate to meet user needs.

WEISER, PAYETTE, AND BOISE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
WEISER nr Weiser	APR-SEP	455	102			640	270	444
	APR-JUL	425	103			595	250	414
NF PAYETTE at Cascade (2)	APR-SEP	555	98			675	435	568
	APR-JUL	520	98			630	410	531
NF PAYETTE nr Banks (2)	APR-SEP	720	98	750	690	860	580	737
	APR-JUL	680	98	715	645	810	550	691
PAYETTE nr Horseshoe Bend	APR-SEP	1830	98	1850	1790	2200	1460	1862
	APR-JUL	1690	98	1710	1670	2030	1350	1717
SF PAYETTE at Lowman	APR-SEP	505	98	505	500	600	410	516
	APR-JUL	450	98	460	435	530	370	458
DEADWOOD RESERVOIR inflow	APR-JUL	139	97			163	115	143
BOISE nr Twin Springs (1)	APR-SEP	740	102	770	710	865	610	722
	APR-JUL	680	102	720	645	795	560	664
BOISE nr Boise (1)	APR-SEP	1650	101	1750	1550	1980	1320	1628
	APR-JUL	1530	101	1640	1420	1830	1230	1508
	APR-JUN	1350	101	1420	1270	1620	1080	1334
SF BOISE at Anderson Ranch Dam (1)	APR-SEP	625	101	655	595	745	515	619
	APR-JUL	585	101	620	550	695	480	578

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
MANN CREEK	11.3	9.7	5.4	8.7	Mann Creek	4	245	127
CASCADE	703.2	452.1	377.4	377.6	Weiser River	8	199	110
DEADWOOD	162.0	67.4	72.0	90.8	North Fork Payette	9	157	97
ANDERSON RANCH	464.2	150.5	134.4	278.1	South Fork Payette	7	160	102
ARROWROCK	286.6	199.2	193.7	227.8	Payette River Total	16	159	99
LUCKY PEAK	307.0	157.8	123.4	153.2	Middle & North Fork Boise	7	149	102
LAKE LOWELL (DEER FLAT)	177.0	137.1	101.2	152.9	South Fork Boise River	9	189	109
					Boise River Total	18	178	112
					Canyon Creek	2	1258	168

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.

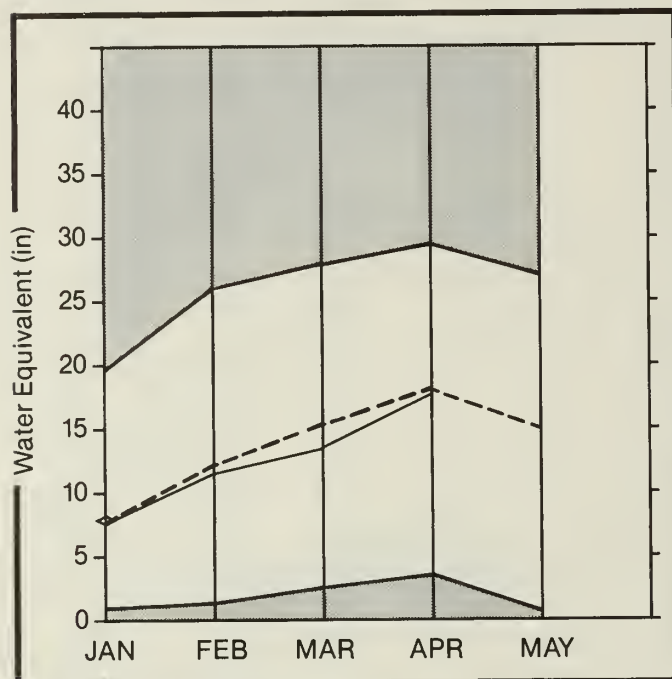
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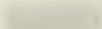
Big Wood, Little Wood, Big Lost, and Little Lost River Basin

Mountain snowpack* (inches)



*Based on selected stations

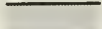
Maximum



Average



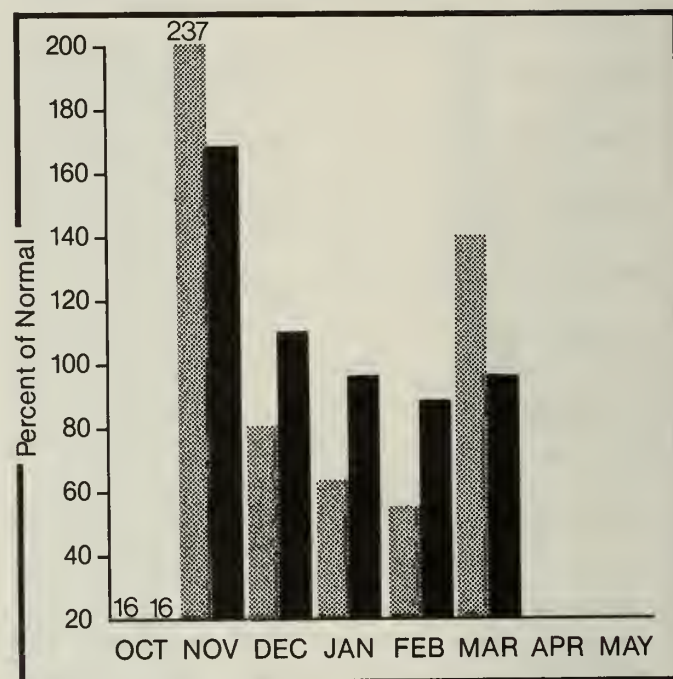
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Much above normal precipitation fell over the basin during March with most mountain stations reporting nearly double their normal accumulation. In comparison to normal, basin snowpacks show a 5 to 12% improvement over last month's figures and are now near to slightly above normal, ranging from 92 to 123%. Apr-Sept streamflow projections have been increased slightly and now range from 92% for the Big Wood River to 98% for the Big Lost. Storage volumes in the major reservoirs also improved during March, but remain near to well below normal, ranging from 36% of average in Magic Reservoir to 99% of average in Little Wood Reservoir. Water supplies for the 1989 season should be adequate to meet user needs.

BIG WOOD, LITTLE WOOD, BIG LOST, AND LITTLE LOST RIVER BASIN

STREAMFLOW FORECASTS

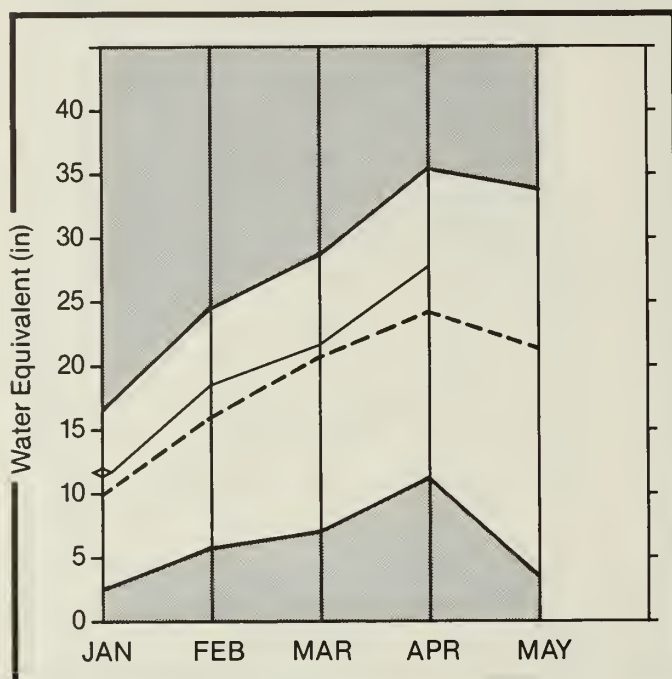
FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
BIG WOOD nr Bellevue	APR-SEP APR-JUL	200 186	92 92			260 245	139 129	217 202
MAGIC RESERVOIR inflow	APR-SEP APR-JUL	325 310	96 96			425 405	225 215	338 322
LITTLE WOOD nr Carey	APR-SEP APR-JUL	104 96	97 97	113 104	99 89	132 122	76 69	107 99
BIG LOST at Howell Ranch nr Chilly	APR-SEP APR-JUL APR-JUN	215 189 145	98 98 98	225 199 148	200 177 139	285 250 191	147 129 99	219 192 148
BIG LOST bl Mackay Reservoir (2)	APR-SEP	187	96	197	173	250	125	195
LITTLE LOST bl Wet Ck	APR-SEP APR-JUL	37 30	95 96	40 33	33 27	51 41	23 19.0	39 31
LITTLE LOST nr Howe	APR-SEP APR-JUL	42 31	95 94	45 33	40 29	57 43	27 20	44 33

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE THIS YEAR	LAST YEAR	** AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE	
MAGIC	191.5	41.7	40.0	117.4	Big Wood ab Magic	10	166	99
LITTLE WOOD	30.0	18.2	20.3	18.4	Camas Creek	5	384	123
CAREY VALLEY		NO REPORT			Big Wood Total	15	193	104
MACKAY	44.5	26.7	28.4	33.3	Little Wood River	3	367	92
					Fish Creek	3	293	106
					Big Lost River	10	182	101
					Little Lost River	4	147	101

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.
 REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.
 (1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.
 (2) - Corrected for upstream diversions or changes in reservoir storage.

Willow Creek, Blackfoot, Upper Snake, and Portneuf River Basin

Mountain snowpack* (inches)



*Based on selected stations

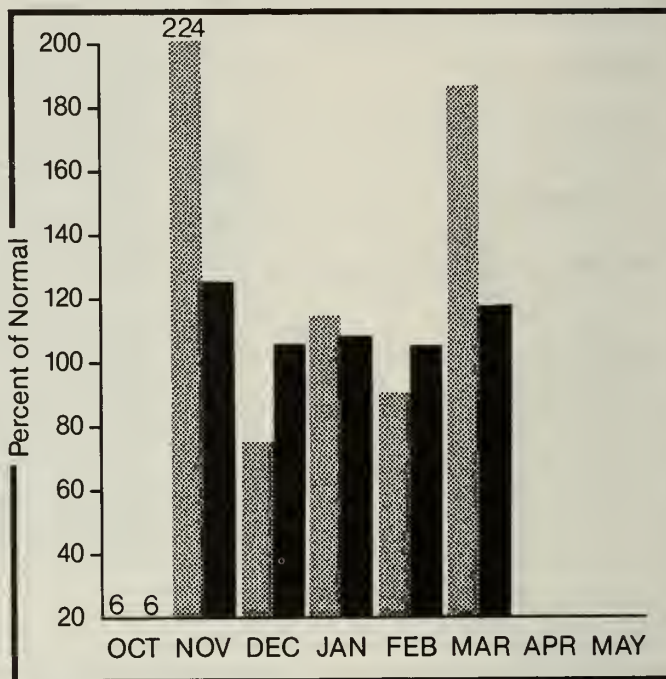
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

March brought much above normal precipitation to the basin with many mountain stations reporting nearly double their normal March accumulations. Snowpacks in the higher elevation basins show a 10-15% improvement in comparison to normal from a month ago. Lower elevation basin snowpacks remain about the same as last month due to snowmelt and much of the precipitation falling in the form of rain. Basin snowpacks currently range from 97% on the Greys River in Wyoming to 119% on the Willow Creek drainage. One exception is the Salt River basin which reports only 83% of normal snowpack. Streamflow volumes are forecast to be good, ranging from 103% of normal for the Portneuf to 118% for the Snake near Moran. Reservoir storage levels also show good improvement for the month, but remain near to below normal with most reservoirs reporting between 64 and 99% of average volumes. Combined storage for the 8 major reservoirs in the basin is now 75% of normal. Water supplies should be good for the coming season.

WILLOW CREEK, BLACKFOOT, UPPER SNAKE, AND PORTNEUF RIVER BASIN

STREAMFLOW FORECASTS

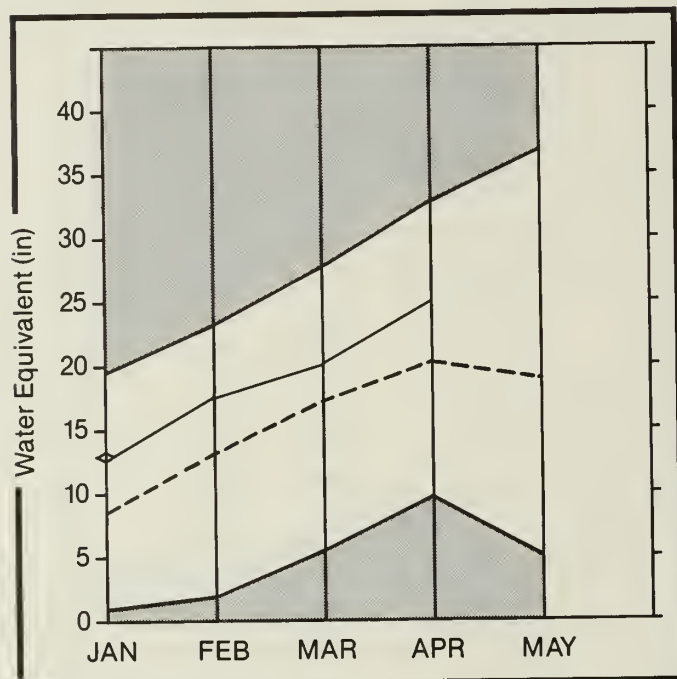
FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
HENRYS FORK nr Ashton (2)	APR-SEP	785	105	800	770	835	725	746
	APR-JUL	585	105	600	570	625	540	557
HENRYS FORK nr Rexburg (2)	APR-SEP	1710	107	1760	1660	1950	1450	1595
	APR-JUL	1350	107	1390	1310	1540	1140	1260
FALLS nr Squirrel	APR-JUL	410	110			470	350	373
TETON ab S Leigh Ck nr Origgs	APR-SEP	210	108	220	200	235	185	194
	APR-JUL	158	109	167	149	177	139	145
TETON nr St. Anthony	APR-SEP	525	110			580	470	479
	APR-JUL	425	110			470	380	387
SNAKE nr Moran (1)	APR-SEP	1050	118	1080	1030	1160	935	888
PALISADES RESERVOIR inflow (1)	APR-SEP	4310	112	4390	4230	4930	3690	3852
SNAKE nr Heise (2)	APR-SEP	4610	111	4780	4440	5440	3820	4142
	APR-JUL	3920	111	4100	3740	4620	3250	3524
SNAKE nr Blackfoot (2)	APR-SEP	6250	110	6360	6140	7160	5280	5680
	APR-JUL	5040	110	5180	4900	5770	4310	4589
PORTNEUF at Topaz	MAR-SEP	112	103	114	109	149	75	109
	MAR-JUL	91	103	95	87	121	61	88

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
ISLAND PARK	127.6	90.0	132.5	119.3	Camas-Beaver Creeks	6	204	110
GRASSY LAKE	15.2	9.5	9.5	11.2	Henrys Fork River	13	156	120
JACKSON LAKE	624.4	143.9	102.9	525.9	Teton River	9	145	115
PALISADES	1357.0	699.8	913.7	968.2	SNAKE above Palisades	32	139	107
AMERICAN FALLS	1700.0	1418.8	1567.7	1452.5	SNAKE above Jackson Lake	10	147	117
BROWNLEE	975.3	645.8	614.0	449.1	Gros Ventre River	3	131	114
BLACKFOOT	348.7	167.8	258.1	260.7	Greys River	5	124	97
HENRY'S LAKE	90.4	69.8	79.4	80.1	Salt River	7	134	83
RIRIE	96.5	48.3	53.6	53.1	Willow Creek	9	162	119
					Blackfoot River	11	162	101
					Portneuf River	13	175	102
					Toponce Creek	4	184	104

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.
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Southside Snake River Basin

Mountain snowpack* (inches)



*Based on selected stations

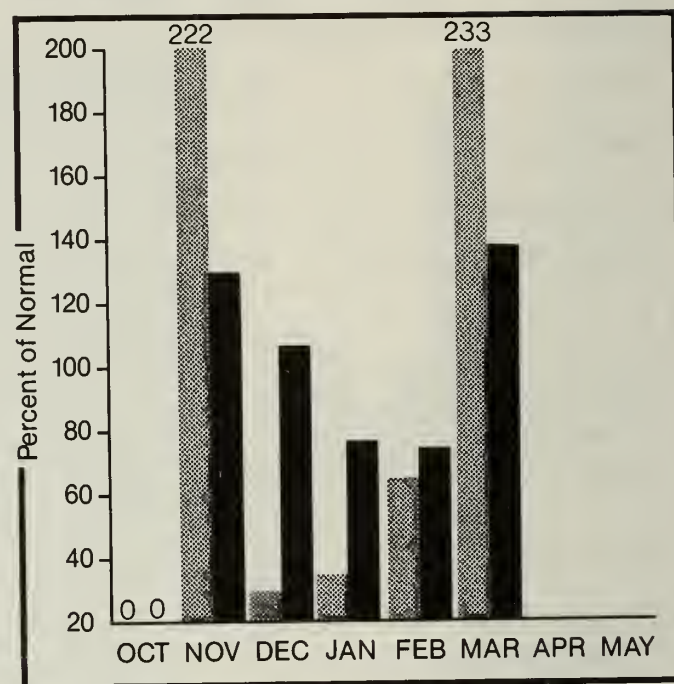
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

Well above normal precipitation fell over the entire basin during March with most mountain stations reporting double their normal accumulation for the month. Much of the low elevation precipitation fell in the form of rain causing lower elevation snowpacks to begin to melt. The combination of melting snow in the lower elevations and above normal accumulations in the high elevations resulted in basinwide snowpack figures remaining about the same as those reported a month ago. Basin snowpacks currently range from 102% on the Raft River basin to 138% on the Owyhee. Seasonal water supply forecasts have been increased slightly and now range from 113% of normal for the Owyhee River near Owyhee to 120% for the inflow to Owyhee Reservoir. Storage in Owyhee Reservoir increased 478,000 acre feet during March and is now 109% of average and 86% of capacity. Oakley and Salmon Falls Creek Reservoirs show good increases, but remain below normal at 54 and 64% respectively.

SOUTHSIDE SNAKE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
OAKLEY RESERVOIR inflow	APR-SEP	38	115	36	41	50	26	33
	APR-JUL	34	114	33	37	45	23	30
SALMON FALLS CK nr San Jacinto	MAR-SEP	120	118	126	114	157	83	102
	MAR-JUL	114	118	122	106	149	79	97
	MAR-JUN	108	119	114	102	141	75	91
BRUNEAU nr Hot Spring	MAR-SEP	300	115	320	285	395	205	260
	MAR-JUL	285	115	305	270	375	193	248
OWYHEE nr Gold Ck (2)	APR-JUL	32	114	37	27	43	21	28
OWYHEE nr Owyhee (2)	APR-JUL	97	113	112	82	132	62	86
OWYHEE nr Rome (2)	APR-JUL	440	119	455	420	605	275	371
	APR-JUL	440	119	455	420	605	275	371
OWYHEE RESERVOIR inflow (1)	APR-SEP	545	120			725	365	455
	APR-JUL	500	117	575	425	670	330	427

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
OAKLEY	77.4	18.4	16.6	34.0	Raft River	9	144	102
SALMON FALLS	182.6	40.0	46.0	62.3	Goose-Trapper Creeks	6	144	104
OWYHEE	715.0	612.6	288.2	560.6	Salmon Falls Creek	11	131	106
					Bruneau River	11	146	113
					Owyhee River	20	245	138

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.

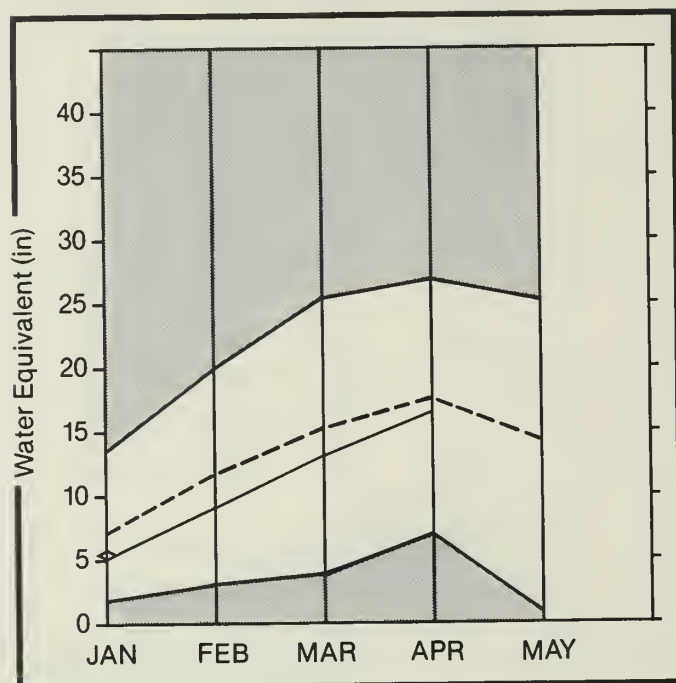
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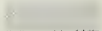
Great Basin

Mountain snowpack* (inches)



*Based on selected stations

Maximum



Average



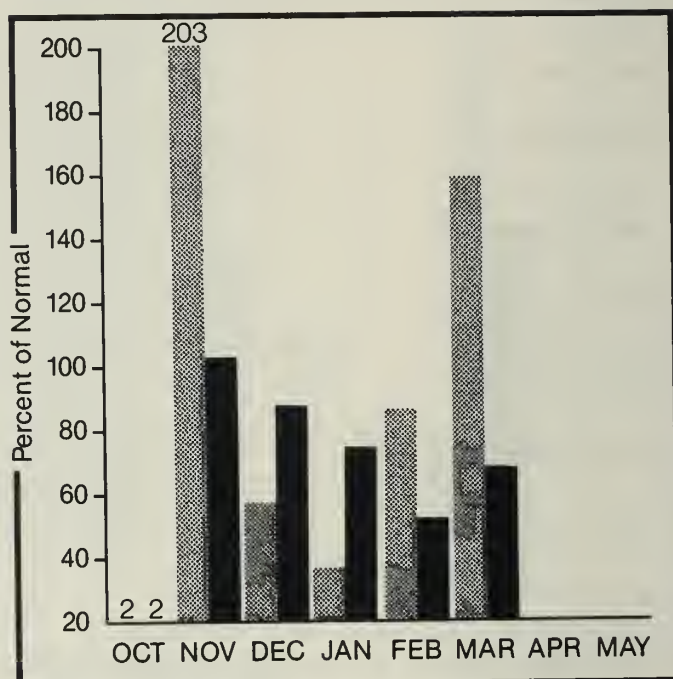
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Although precipitation amounts during March were above to well above normal over much of the area, April 1 snow surveys indicate basinwide snowpacks remain near to slightly below average. Snowpack conditions currently range from 85% of average on the Malad River to 99% on the Cub River. Apr-Sept streamflows are forecast to be below normal, ranging from 66% on the Bear River at Harer to 91% on the Cub River. Reservoir carryover storage volumes continue to lag behind normal with Bear Lake reporting 87% of average storage and Montpelier Creek Reservoir 50% of average.

GREAT BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
BEAR RIVER near Harer	APR-SEP	205	66	215	193	330	78	310
MONTPELIER CK nr Montpelier	APR-SEP	12.0	86			17.3	6.7	13.9
CUB RIVER near Preston	APR-SEP	47	91	50	44			52
	APR-JUL	43	92	46	40	53	33	47

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
BEAR LAKE	1421.0	869.0	1064.7	1002.1	Bear River (above Harer)	12	128	89
MONTPELIER CREEK	4.0	0.8	1.2	1.6	Montpelier Creek	5	134	94
					Mink Creek	6	153	97
					Cub River	4	162	99
					Malad River	7	182	85

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SNOW DATA MEASUREMENTS

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	OATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
UPPER COLUMBIA BASIN							WATERSHEO II						
ABOVE BURKE	4100	4/01/89	---	19.0E	15.2	22.6	BREEZY SADDLE	5010	3/30/89	79	28.3	24.8	32.8
ABOVE ROLANU	4350	4/07/89	79	35.0	24.8	33.1	BUCK MEADOWS	5650	3/30/89	93	35.0	26.6	30.7
BEAR MOUNTAIN	5400	3/26/89	127	53.9	37.0	61.1	CAYUSE AIRSTRIP	3500	4/01/89	30	11.1	5.5	8.7
BENTON MEADOW	2370	3/30/89	13	4.4	.0	4.2	COOL CREEK	6250	4/01/89	148	50.1	39.6	52.7
BENTON SPRING	4920	3/30/89	57	19.6	13.2	19.4	COOL CREEK PILLOW	6280	4/01/89	---	49.2	40.4	49.6
BREEZY SADDLE	5010	3/30/89	79	28.3	24.8	32.8	COOLWATER MOUNTAIN	6030	3/30/89	130	46.1	33.4	34.9
CONIE RIUGE	3900	4/04/89	31	13.0	3.3	6.2	CRATER MEADOWS	5960	3/30/89	123	43.0	37.7	45.4
CORNER CREEK	3150	4/04/89	32	13.0	4.6	6.1	CRATER MUWS PILLOW	5960	4/01/89	---	49.5	39.3	48.0
EAST RAGGED SADDLE	3740	4/01/89	58	24.2	---	21.0	CROOKEU FORK	3610	3/30/89	37	13.6	12.2	12.4
EAST TWIN	4130	3/31/89	36	15.6	3.7	8.8	ELK BUTTE	5550	3/30/89	115	38.1	23.1	37.4
FORTY-NINE MEADOWS	4830	3/30/89	---	27.2E	22.9	31.2	ELK BUTTE PILLOW	5550	4/01/89	---	43.5	29.9	42.0
FOURTH OF JULY SUM	3200	3/29/89	32	12.4	1.7	7.3	FISH LAKE AIRSTRIP	5650	3/30/89	109	38.0	37.1	40.0
GRANITE PEAK	6000	4/01/89	110	36.8	34.7	45.4	FORTY-NINE MEADOWS	4830	3/30/89	---	27.2E	22.9	31.2
HUMBOLDT GULCH	4250	3/30/89	42	14.3	12.8	16.8	GOAT LAKE	6500	4/01/89	127	44.7	38.9	48.0
HUMBOLDT GLCH PILLOW	4250	4/01/89	---	13.4	7.7	15.8	GRANITE PEAK	6000	4/01/89	110	36.8	34.7	45.4
KELLOGG PEAK AM	5560	4/07/89	70	28.7	20.0	32.9	HEMLOCK BUTTE	5810	4/01/89	135	50.2	33.3	50.2
LOOKOUT	5140	3/30/89	82	26.0	25.0	35.1	HEMLOCK BUTTE PILLOW	5810	4/01/89	---	54.8	37.2	51.0
LOOKOUT PILLOW	5140	4/01/89	---	30.2	25.4	33.6	HOODOO BASIN PILLOW	6050	4/01/89	---	43.1	37.6	48.9
LOST LAKE	6110	3/30/89	146	47.3	41.6	59.3	HOODOO CREEK	5900	3/28/89	120	42.2	37.8	47.8
LOST LAKE PILLOW	6110	4/01/89	---	56.9	46.7	66.1	KIT CARSON PASTURE	4950	3/29/89	28	9.2	9.0	8.9
LOWER SANDS CREEK	3120	3/31/89	64	24.2	13.5	20.0	LOLO PASS	5240	3/30/89	72	25.8	23.8	30.7
MOSCOW MOUNTAIN	4410	3/31/89	62	25.0	---	17.2	LOLO PASS PILLOW	5240	4/01/89	---	30.2	26.2	33.1
MOSQUITO RIDGE	5200	4/07/89	97	39.0	27.2	38.2	LOST LAKE	6110	3/30/89	146	47.3	41.6	59.3
MOSQUITO PILLOW	5200	4/07/89	102	41.5	---	38.7	LOST LAKE PILLOW	6110	4/01/89	---	56.9	46.7	66.1
ROLAND SUMMIT	5120	4/07/89	91	39.6	33.4	38.2	MOUNTAIN MEADOWS	6360	3/30/89	71	23.1	18.5	23.8
SAGE CREEK SAOOLE	4080	4/04/89	65	23.8	10.9	18.4	MOUNTAIN MDWS PILLOW	6360	4/01/89	---	24.3	22.3	26.2
SCHWEITZER BASIN	6090	3/29/89	124	48.9	37.8	47.8	NEZ PERCE PASS	6570	3/29/89	49	15.8	15.6	17.8
SCHWEITZER BN PILLOW	6090	4/01/89	---	47.0	42.4	50.2	PIERCE R.S.	3080	3/31/89	32	14.1	3.4	8.9
SCHWEITZER BOWL	4800	3/29/89	63	24.9	22.7	30.5	SAVAGE PASS	6170	3/30/89	78	27.4	24.6	27.3
SCHWEITZER RIDGE	6200	3/29/89	116	45.0	36.5	47.9	SAVAGE PASS PILLOW	6170	4/01/89	---	28.1	24.0	29.0
SHERWIN	3200	3/30/89	48	18.8	7.7	12.1	SHANGHAI SUMMIT	4570	4/01/89	84	34.3	16.4	26.5
SKITWISH RIDGE	5110	4/03/89	99	35.0	22.3	33.2	SHANGHAI SUM PILLOW	4570	4/01/89	---	36.4	18.5	27.9
SMITH CREEK	4800	3/29/89	110	39.0	36.8	46.4	SHERWIN	3200	3/30/89	48	18.8	7.7	12.1
SUNSET	5540	4/07/89	83	32.4	21.0	33.5	TWIN LAKES	6510	3/29/89	108	41.3	36.7	42.8
SUNSET PILLOW	5540	4/01/89	---	34.6	26.8	35.8	WEBB CREEK	4720	3/30/89	34	13.0	7.2	9.0
WEST TWIN	4220	3/31/89	38	15.4	2.0	7.5	WEISER, PAYETTE, ANU BOISE BASINS						
							ATLANTA SUMMIT	7600	3/29/89	106	35.9	24.1	35.6
							ATLANTA SUM PILLOW	7580	4/01/89	---	33.5	22.7	32.6
							ATLANTA TOWNSITE	5370	3/30/89	27	9.4	6.6	---
							BANNER SUMMIT	7040	3/30/89	90	28.5	18.3	30.8
							BANNER SUMMIT PILLOW	7040	4/01/89	---	28.2	18.8	27.9
							BAO BEAR	4940	3/30/89	39	17.1	9.3	13.4
							BEAR BASIN	5350	3/27/89	60	22.6	12.0	20.1
							BEAR BASIN PILLOW	5350	4/01/89	---	24.9	15.7	20.3
							BEAR SADOLE	6180	4/01/89	88	34.5	13.9	31.4
							BEAR SADOLE PILLOW	6180	4/01/89	---	32.9	14.8	31.6
							BIG CREEK SUMMIT	6580	3/25/89	99	31.7	24.7	37.5
							BIG CREEK SUM PILLOW	6580	4/01/89	---	36.0	20.8	33.9
							BOGUS BASIN	6340	3/31/89	86	33.3	17.8	25.2
							BOGUS BASIN ROAD	5540	3/31/89	20	7.2	.0	2.2
							BOULOER CREEK	5440	3/31/89	---	21.9E	12.2	23.6
							BRUNDAGE MOUNTAIN	7560	3/26/89	---	42.9E	30.3	48.3
							CAMAS CREEK DIVIOE	5710	4/01/89	44	16.1	1.9	10.2
							CHIMNEY CREEK	6400	4/01/89	37	14.9	5.7	13.4
							COUCH SUMMIT	6840	4/01/89	---	19.8E	8.9	18.8
							COZY COVE	5380	3/30/89	32	13.1	7.2	15.8
							COZY COVE PILLOW	5380	4/01/89	---	14.7	---	---
							CRAWFORD R.S.	4860	3/25/89	17	7.2	1.2	5.7
							DEADMAN GULCH	5600	3/28/89	59	24.5	14.5	16.8
							OEADWOOD AIRSTRIP	5360	3/30/89	---	12.5E	7.4	15.3
							DEADWOOD SUMMIT	6860	3/30/89	120	42.8	30.4	46.4
							DOLLARHIOE SUMMIT	8420	3/29/89	80	25.6	15.8	25.4
							OOLLARHIDE SM PILLOW	8420	4/01/89	---	27.0	16.5	26.0
							GRAHAM GUARD STATION	5690	3/30/89	38	14.3	10.7	15.5
							GRAHAM G.S. PILLOW	5690	4/01/89	---	15.3	---	17.7
							IDAHO CITY TOWNSITE	4000	3/30/89	0	.0	.0	1.4
							JACKSON PEAK	7070	3/30/89	93	31.2	20.8	32.2
							LAKE FORK	5290	3/27/89	46	15.3	9.2	16.2
							LITTLE CAMAS FLAT	4940	4/01/89	19	7.8	.0	4.0
							MANN CREEK	6080	4/01/89	85	34.8	15.7	26.6
							MOORES CREEK SUMMIT	6100	3/30/89	94	35.0	24.1	33.0
							MOORES CK SUM PILLOW	6100	4/01/89	---	40.6	26.7	35.2
							PLACER CREEK	5860	3/30/89	52	17.3	12.4	18.9
							PRAIRIE	4800	3/31/89	13	5.2	.0	2.9
							PRAIRIE PILLOW	4800	4/01/89	---	3.1	.0	---
							ROAD CREEK	5380	3/30/89	24	9.5	6.9	8.4
							ROBINSON CREEK RIDGE	6220	4/01/89	69	31.0	12.0	20.7
							ROCK FLAT SUMMIT	5310	3/30/89	---	21.9E	12.5	19.1
							SECESH SUMMIT	6520	3/26/89	94	33.8	23.6	36.8
							SECESH SUMMIT PILLOW	6520	4/01/89	---	34.7	27.5	37.3
							SOLDIER R.S.	5740	4/01/89	30	11.6	1.8	10.6
							SOLDIER R.S. PILLOW	4330	4/01/89	---	12.9	2.4	---
							SQUAW FLAT	6240	3/27/89	65	25.1	16.2	27.9
							SQUAW FLAT PILLOW	6240	4/01/89	---	23.1	16.6	25.4
							SQUAW MEADOW	5900	3/26/89	88	34.0	23.2	37.0
							STURGILL RIDGE	6680	4/01/89	95	35.4	16.6	33.0
							THORSON CABIN	5320	4/01/89	44	19.4	7.2	15.3
							TRINITY MOUNTAIN	7770	3/29/89	119	45.4	29.3	42.8
							TRINITY MTN. PILLOW	7770	4/01/89	---	43.0	28.2	41.3
							TRIPOD SUMMIT	5260	3/25/89	54	20.7	12.2	18.9
							VIENNA MINE	8960	3/30/89	110	37.3	24.1	37.9
							VIENNA MINE PILLOW	8960	4/01/89	---	34.3	25.8	37.8
							WEST BRANCH	5560	3/31/89	66	24.2	15.2	25.6
							WEST BRANCH PILLOW	5560	4/01/89	---	24.6	16.3	25.7

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
SOUTHSIDE SNAKE BASIN							WATERSHED VII						
ANTELOPE RIDGE	6180	3/30/89	16	6.6	.0	6.3	CHRISTENSEN RANCH	5560	3/23/89	20	8.3	6.0	8.1
BADGER GULCH	6660	3/30/89	43	16.2	9.0	13.5	CLIFF CANYON	7200	3/23/89	13	4.6	3.4	10.5
BATTLE CREEK	5720	4/05/89	0	.0	.0	1.7	CUB RIVER R.S.	5450	3/23/89	20	7.9	3.5	7.3
BEAR CREEK	7800	3/30/89	75	27.9	19.6	22.2	DANIELS CREEK	6270	3/23/89	13	5.0	3.6	5.2
BEAR CK SNOTEL	7800	4/01/89	---	27.8	18.5	33.9	DRY BASIN	7820	3/23/89	77	27.8	18.0	30.6
BIG BEND	6700	3/27/89	34	13.5	6.0	9.0	DRY CREEK FLAT	6360	3/23/89	11	4.9	2.0	5.8
BOSTETTER R.S.	7500	3/30/89	56	20.5	16.4	20.6	EMIGRANT SUMMIT	7390	3/30/89	66	24.3	16.3	25.9
BOSTETTER RS PILLOW	7500	4/01/89	---	23.7	12.0	18.7	EMIGRANT SUM PILLOW	7390	4/01/89	---	23.3	---	30.0
BOY SCOUT CAMP	7740	3/30/89	52	16.9	13.6	17.0	EMIGRATION CANYON	6500	3/30/89	26	9.8	7.4	11.1
BULL BASIN	5460	4/05/89	0	.0	.0	.6	FRANKLIN BASIN	8020	3/24/89	71	24.5	17.8	28.3
CEDAR CREEK	6820	3/30/89	29	11.2	8.9	10.5	GIVEOUT	6860	3/30/89	39	12.8	10.5	13.2
CLEAR CREEK MEADOWS	9420	3/30/89	77	25.6	17.0	24.1	GIVEOUT PILLOW	6840	4/01/89	---	11.0	11.0	14.4
COLUMBIA BASIN	6650	3/30/89	18	7.0	---	6.9	GIVEOUT NEW	6930	3/30/89	29	9.6	---	11.7
DEADLINE	7400	3/30/89	41	18.1	11.4	22.9	LIBERTY SPRING	8600	3/23/89	106	41.0	27.1	40.2
DEADLINE SOUTH	7450	3/30/89	57	22.0	16.9	25.1	LITTLE BEAVER	6790	3/30/89	---	15.5E	13.2	16.2
FAWN CREEK	7050	3/27/89	44	17.2	---	8.6	LOWER ELKHORN	6960	3/23/89	33	13.2	6.9	14.0
FOX CREEK	6800	3/30/89	28	11.3	11.1	10.5	LOWER HOME CANYON	7640	3/30/89	---	14.6E	9.7	14.7
FRY CANYON	6700	3/27/89	15	5.4	.1	6.9	OXFORD MOUNTAIN	6800	3/23/89	20	8.0	3.9	9.6
GEORGE CREEK	8840	3/30/89	70	24.0	15.0	23.2	OXFORD SPRING	6740	3/23/89	24	10.5	4.5	10.7
GOAT CREEK	8800	3/30/89	67	21.5	17.4	19.2	OXFORD SPRING PILLOW	6740	4/01/89	---	9.4	---	12.6
GOLD CREEK	6600	3/27/89	15	5.9	1.7	5.3	STRANBERRY CREEK	5820	3/30/89	24	9.5	5.7	10.7
HOWELL CANYON	7980	3/30/89	83	32.6	21.0	26.7	STRAWBERRY-MINK DVO	6720	3/23/89	55	22.4	14.3	22.4
HOWELL CANYON PILLOW	7980	4/01/89	---	27.9	---	22.7	UPPER ELKHORN	7140	3/23/89	50	17.9	10.9	19.7
HUMMINGBIRD SPRINGS	8950	3/30/89	87	29.4	23.5	24.7	UPPER HOME CANYON	8560	3/29/89	74	24.7	16.4	25.1
HYDE PASTURE	5760	4/05/89	0	.0	.0	3.5	WILLOW FLAT	6070	3/23/89	43	18.0	10.8	15.5
INDIAN GROVE	7560	3/30/89	40	13.7	8.6	13.1	WORM CREEK	6620	3/23/89	51	20.4	11.7	20.2
JACK CREEK, LOWER	6800	3/27/89	3	.5	.2	3.3							
JACKS PEAK	8420	3/27/89	104	32.9	17.6	26.8							
JOHNSTON POND	6700	3/30/89	57	23.6	.0	---							
LANGFORD FLAT CREEK	5980	3/30/89	12	4.8	3.6	5.2							
LAUREL DRAW	6700	3/27/89	28	11.6	8.3	8.4							
LOGGER SPRINGS	8120	3/30/89	60	20.1	14.8	19.7							
LOOKOUT BUTTE	5650	4/05/89	0	.0	.0	.0							
LOUSE CANYON	6440	4/05/89	13	5.2	.0	5.6							
MAGIC MOUNTAIN	6880	3/30/89	55	22.4	15.8	20.1							
MAGIC MTN PILLOW	6880	4/01/89	---	23.6	16.2	20.1							
MERRIT MOUNTAIN	7000	3/30/89	24	9.8	---	5.3							
MUD FLAT	5730	3/30/89	10	4.0	.8	5.3							
MUD FLAT PILLOW	5730	4/01/89	---	4.8	.0	4.8							
ONE MILE SUMMIT	7330	3/30/89	10	2.6	3.8	7.7							
OREGON CANYON	6950	4/05/89	35	14.0	.1	5.8							
POLE CREEK R.S.	8330	3/30/89	62	21.8	20.6	22.0							
QUINN RIDGE	6300	4/05/89	0	.0	.0	1.1							
REO CANYON	6650	4/05/89	19	7.6	.0	6.0							
RODEO FLAT	6800	3/27/89	15	5.2	2.0	6.4							
SEVENTYSIX CREEK	7100	3/27/89	37	13.7	8.4	12.6							
SEVENTYSIX CK SNOTEL	7100	3/27/89	35	13.5S	6.2	---							
SHOSHONE BASIN	5810	3/30/89	---	4.6E	3.4	4.9							
SILVER CITY	6400	3/25/89	52	22.2	11.9	16.0							
SOUTH MOUNTAIN	6500	3/30/89	49	21.9	11.2	14.7							
SOUTH MTN PILLOW	6500	4/01/89	---	31.7	---	14.5							
SUBLETT	5950	3/30/89	27	9.9	8.8	11.3							
SUCCOR CREEK	6100	4/05/89	35	14.4	3.6	6.8							
TAYLOR CANYON	6200	3/27/89	10	3.3	.1	3.7							
TOE JAM AM	7700	3/30/89	34	9.0	---	9.9							
VAUGHT RANCH	5830	4/05/89	0	.0	.0	1.7							
VIPONT	7670	3/30/89	46	16.9	10.2	16.5							
WAR EAGLE	7280	4/05/89	100	42.0	24.8	23.3							
WILSON CREEK	7500	3/30/89	48	18.3	13.2	13.4							

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
BIG WOOD, LITTLE WOOD, BIG LOST, AND LITTLE LOST BASINS WATERSHED V							WILLOW, BLACKFOOT, UPPER SNAKE, AND PORTNEUF BASINS WATERSHED VI						
BEAR CANYON	7900	3/29/89	60	18.2	10.6	19.3	ASPEN GROVE	6500	3/30/89	---	11.5E	9.4	12.6
BEAR CANYON PILLOW	7900	4/01/89	---	17.2	10.7	17.3	AUSTIN BROTHERS RNCH	6400	3/31/89	---	8.1E	5.7	8.8
CAMAS CREEK DIVIDE	5710	4/01/89	44	16.1	1.9	10.2	BEAVERDAM CREEK	6120	3/31/89	21	5.7	5.0	9.7
CHIMNEY CREEK	6400	4/01/89	37	14.9	5.7	13.4	BIG SPRINGS	6400	3/31/89	68	24.6	12.9	21.4
COPPER BASIN	7640	3/29/89	30	9.1	4.5	10.5	BIRCH CREEK	6800	3/30/89	36	14.0	7.3	11.4
COUCH SUMMIT	6840	4/01/89	---	19.8E	8.9	18.8	BLACK BEAR	7950	3/30/89	136	52.3	36.0	43.2
DOLLARHIDE SUMMIT	8420	3/29/89	80	25.6	15.8	25.4	BLACK CANYON	7960	3/29/89	122	42.4	27.4	---
DOLLARHIDE SM PILLOW	8420	4/01/89	---	27.0	16.5	26.0	BLACK MOOSE	8160	3/31/89	---	55.0E	31.3	40.1
DRY FORK	7220	3/31/89	54	17.2	8.5	16.3	BLUE LEDGE MINE	6900	3/31/89	---	24.3E	10.9	17.5
FISHPOLE LAKE	9300	3/29/89	66	22.1	14.9	22.1	BLUE RIDGE	6780	3/30/89	62	25.6	13.6	19.6
GALENA	7440	3/31/89	---	18.6E	11.9	19.0	BONE	6200	3/30/89	20	7.5	5.6	6.8
GALENA PILLOW	7440	4/01/89	---	18.4	11.9	18.8	BROCKMAN STATION	6430	3/30/89	32	11.5	8.9	9.2
GALENA NEW	7470	3/30/89	69	21.4	13.0	21.3	CAMP CREEK	6580	3/30/89	29	10.2	4.7	11.6
GALENA SUMMIT	8780	3/30/89	71	21.8	14.6	24.4	COULTER CREEK	7020	3/26/89	66	21.8	15.9	22.7
GALENA SUMMIT PILLOW	8780	4/01/89	---	19.4	14.2	19.6	COLD SPRINGS	7000	3/25/89	61	25.3	14.8	22.9
GARFIELD R.S.	6560	3/29/89	24	10.0	.0	10.3	CRAB CREEK	6860	4/01/89	65	21.5	10.5	16.7
GARFIELD R.S. PILLOW	6560	4/01/89	---	11.2	3.1	10.4	CRAB CREEK PILLOW	6860	4/01/89	---	23.7	9.6	17.2
GRAHAM RANCH	6270	3/30/89	47	14.8	6.6	14.5	EAST CREEK	7000	3/31/89	35	10.1	9.0	11.9
HILTS CREEK	8000	3/29/89	47	12.3	7.9	11.6	FALL CREEK	6820	3/30/89	28	10.1	4.5	9.7
HILTS CREEK PILLOW	8000	4/01/89	---	13.8	10.8	13.5	GRASSY LAKE	7270	3/30/89	107	41.4	29.2	36.2
HYNDMAN CREEK	7440	3/29/89	53	15.1	8.4	14.5	GRASSY LAKE PILLOW	7270	4/01/89	---	41.1	28.5	37.5
HYNDMAN PILLOW	7440	4/01/89	---	14.9	8.7	13.2	INDIAN MEADOWS	9420	3/30/89	124	43.0	31.0	38.6
IRON BOG	7650	3/31/89	42	12.7	5.4	13.5	IRVING CREEK	7040	3/31/89	25	7.5	4.4	5.8
IRON MINE CREEK	6300	3/31/89	40	12.4	4.0	11.1	ISLAND PARK	6290	3/31/89	60	21.8	11.0	17.3
LEADBELT	6700	3/31/89	22	6.6	1.9	9.4	ISLAND PARK PILLOW	6290	4/01/89	---	19.0	12.2	16.6
LEATHERMAN PASS	9860	4/01/89	78	25.0	15.2	24.8	JACKPINE CREEK	7350	3/30/89	75	24.9	17.2	22.5
LITTLE CAMAS FLAT	4940	4/01/89	19	7.8	.0	4.0	JOHNSON CREEK	6730	3/31/89	34	12.9	9.6	14.3
LOST-WOOD DIVIDE	7900	3/29/89	79	25.3	15.2	24.0	KILGORE	6320	4/01/89	40	14.1	7.2	11.8
LOST-WOOD DVD PILLOW	7900	4/01/89	---	26.8	14.3	25.3	LATHAM SPRINGS	7630	3/29/89	107	40.3	26.1	33.8
MASCOT MINE	7780	3/31/89	---	15.3E	7.8	15.4	LAVA CREEK	7350	3/30/89	55	19.7	11.2	15.1
MOONSHINE	7440	3/30/89	38	9.5	7.5	10.7	LUCKY DOG	6860	3/29/89	89	33.8	20.4	34.4
MOONSHINE PILLOW	7440	4/01/89	---	11.8	10.2	11.4	MADISON PLATEAU	7750	3/30/89	86	30.8	21.6	24.1
MOUNT BALDY	8920	3/29/89	74	21.7	13.2	21.7	MC RENOLDS RESERVOIR	6720	3/30/89	57	19.3	12.1	20.2
MULDOON	6320	3/29/89	9	3.7	.0	6.9	MINK CREEK	6410	3/31/89	59	22.4	11.1	19.2
SAWMILL CANYON	7000	3/30/89	27	8.5	4.6	7.9	MUD CREEK	7100	3/30/89	74	26.3	17.0	19.8
SOLDIER R.S.	4330	4/01/89	---	12.9	2.4	---	NORTH PUTNAM	7240	3/31/89	81	32.2	15.2	29.0
SOLDIER R.S. PILLOW	4330	3/29/89	30	9.2	5.1	10.4	PACKSADDLE SPRING	8200	3/30/89	99	36.2	24.2	30.3
STICKNEY MILL	7430	3/29/89	30	8.7	3.8	9.6	PEBBLE CREEK	6550	3/25/89	40	13.8	9.1	16.4
STICKNEY MILL PILLOW	7430	4/01/89	---	8.7	3.8	9.6	PHILLIPS BENCH	8200	3/30/89	108	36.4	24.9	30.5
SWEDE PEAK	7640	3/29/89	59	19.0	8.9	18.3	PHILLIPS BENCH PILL.	8200	4/01/89	---	37.1	22.6	29.0
SWEDE PEAK PILLOW	7640	4/01/89	---	18.5	---	16.4	PINE CREEK PASS	6810	3/31/89	57	21.6	14.5	17.8
TELFER RANCH	5840	3/31/89	21	7.0	.0	7.0	PUTNAM	7220	3/30/89	61	20.7	12.2	21.4
VIENNA MINE	8960	3/30/89	110	37.3	24.1	37.9	SAWTELL MOUNTAIN	8720	3/31/89	128	45.7	29.1	36.5
VIENNA MINE PILLOW	8960	4/01/89	---	34.3	25.8	37.8	SEDGWICK PEAK	7850	3/31/89	60	20.4	10.8	18.6
WET CREEK SUMMIT	7680	3/29/89	42	13.1	9.6	12.8	SHEEP MOUNTAIN	6570	3/30/89	32	12.6	9.8	14.1
							SHEEP MTN PILLOW	6570	4/01/89	---	17.1	10.9	16.6
							SLUG CREEK DIVIDE	7230	3/29/89	40	14.0	11.0	17.6
							SLUG CK DVD PILLOW	7230	4/01/89	---	16.2	13.0	20.0
							SOMSEN RANCH	6840	3/31/89	41	16.1	10.5	15.1
							SOMSEN RANCH PILLOW	6800	4/01/89	---	12.9	9.7	14.8
							STATE LINE	6660	3/31/89	50	17.8	13.9	15.0
							SULPHUR PEAK	7070	3/31/89	---	14.7E	10.5	16.9
							TARGHEE PASS	6980	3/31/89	---	16.4E	9.8	16.1
							TETON PASS W.S.	7740	3/30/89	94	31.8	21.6	26.8
							TEX CREEK	6650	3/30/89	---	9.6E	6.7	10.2
							TOPONCE	6160	3/30/89	42	15.9	9.0	17.1
							TWITCHELL CANYON	6300	3/31/89	50	20.6	12.1	16.9
							VALLEY VIEW	6680	3/31/89	52	18.4	10.8	17.7
							WEBBER CREEK	6700	3/31/89	20	6.8	3.8	6.0
							WHISKEY CREEK	6800	4/01/89	76	28.3	17.0	21.8
							WHITE ELEPHANT	7710	3/31/89	100	34.3	20.1	26.6
							WHITE ELEPHANT PILL	7710	4/01/89	---	38.4	22.0	27.8
							WILHORSE DIVIDE	6490	3/31/89	55	20.4	9.9	17.9
							WILHORSE DVD PILLOW	6490	4/01/89	---	21.5	10.2	17.4
							WOOU CANYON DIVIDE	7450	3/31/89	---	18.3E	11.6	19.8

The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State

Idaho Department of Water Resources
Soil and Water Conservation Districts of Idaho

Federal

U.S. Department of Agriculture
Forest Service
U.S. Department of Army
Corps of Engineers
U.S. Department of Commerce
NOAA, National Weather Service
U.S. Department of Interior
Bureau of Reclamation
Geological Survey, Water Resources Division
Shoshone-Bannock Tribal Council

Local

Big Lost River Irrigation District
Big Wood Irrigation Company
Boise Project Board of Control
Idaho Water District #01
Lewiston Orchards Irrigation District
Little Wood River Irrigation District
North Board of Control — Owyhee Project
Salmon Falls Irrigation Company
South Board of Control — Owyhee Project

Private

Cyprus Mining Company
FMC Corporation
Idaho Power Company
Le Bois Resort
Washington Water Power Company

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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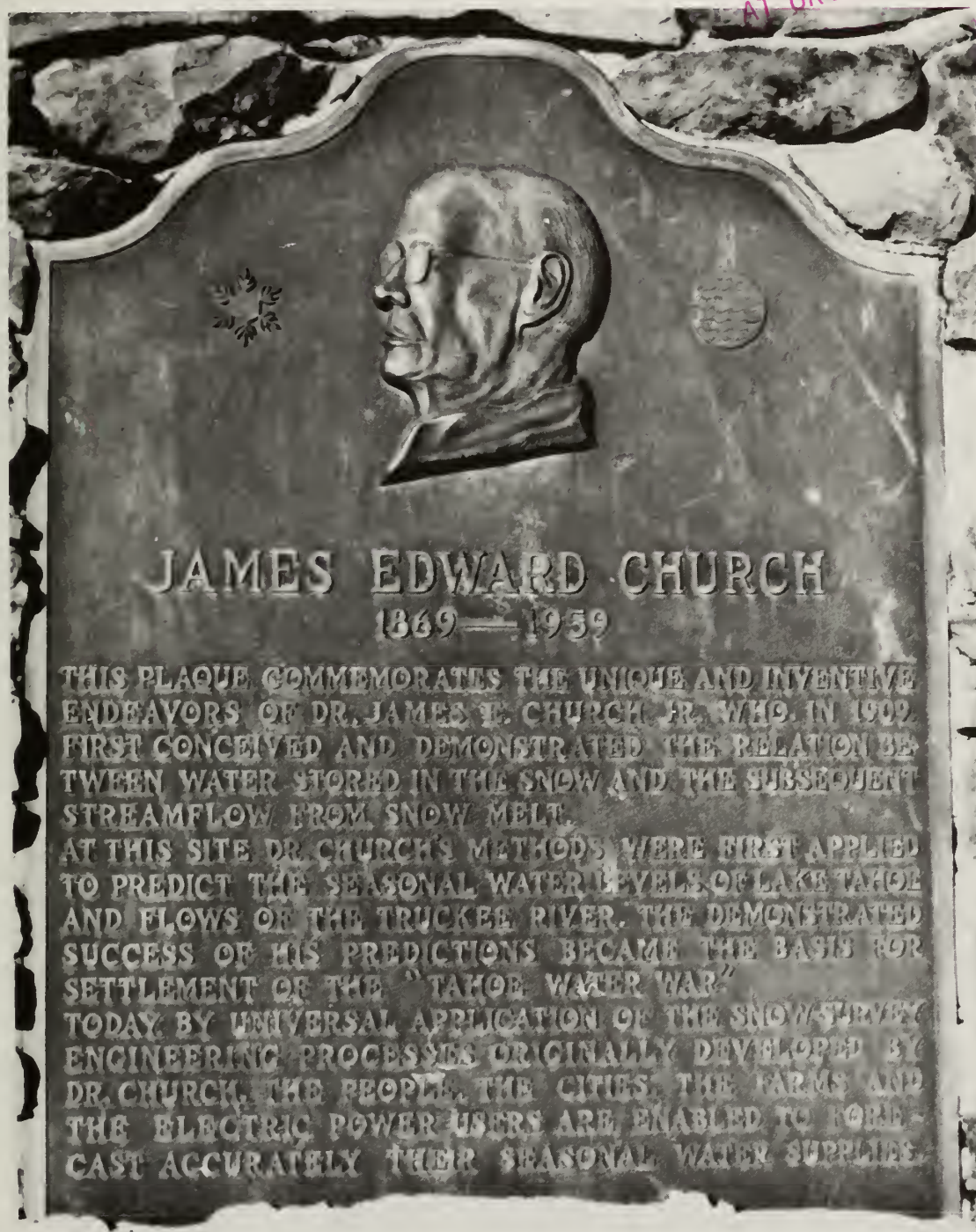
Idaho Water Supply Outlook

May 1, 1989

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JUN 12 1989

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN



Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Soil Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

An error is associated with each forecast, and this error decreases as the season progresses and more data becomes available. To express the range of error that can be expected, "most probable" forecasts are issued along with a range representing a "reasonable minimum" and a "reasonable maximum". Actual streamflow can be expected to fall within this range in eight out of ten years. Additionally two specific scenarios are provided based on the assumption that subsequent precipitation will be "wet", above average, or "dry", below average.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola Ave., Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Building A, 3rd floor, Denver, CO 80211
Idaho	3244 Elder Street, Room 124, Boise, ID 83705
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 87102-3157
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97204
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	W. 920 Riverside, Room 360, Spokane, WA 99201-1080
Wyoming	Federal Building, 100 "B" Street, Room 3124, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209-3489.

Water supply reports published by other agencies:

California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Idaho Water Supply Outlook

and

Federal — State — Private Cooperative Snow Surveys

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In cooperation with

R. Keith Higginson
Director
State of Idaho
Department of Water Resources
Boise, Idaho

COVER: This plaque on the outlet gate at Lake Tahoe, Nevada,
commemorates the start of snow surveys in 1909.

"Programs and assistance of the United States Department of Agriculture are
available without regard to race, creed, color, sex, age, or national origin."

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THE HISTORY OF THE

REIGN OF

CHARLES THE FIRST

BY

JOHN BURNET

OF LINCOLN

IN TWO VOLUMES

LONDON

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1704

THE HISTORY OF THE

REIGN OF

CHARLES THE FIRST

BY

JOHN BURNET

OF LINCOLN

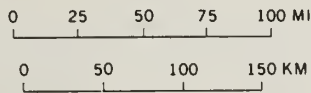
IN TWO VOLUMES

LONDON

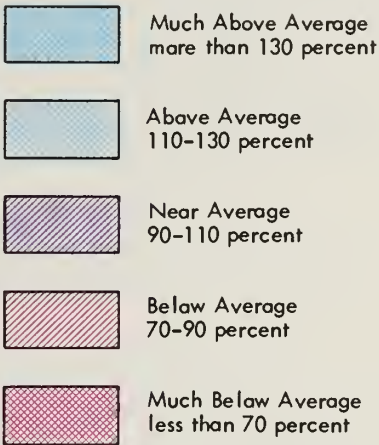
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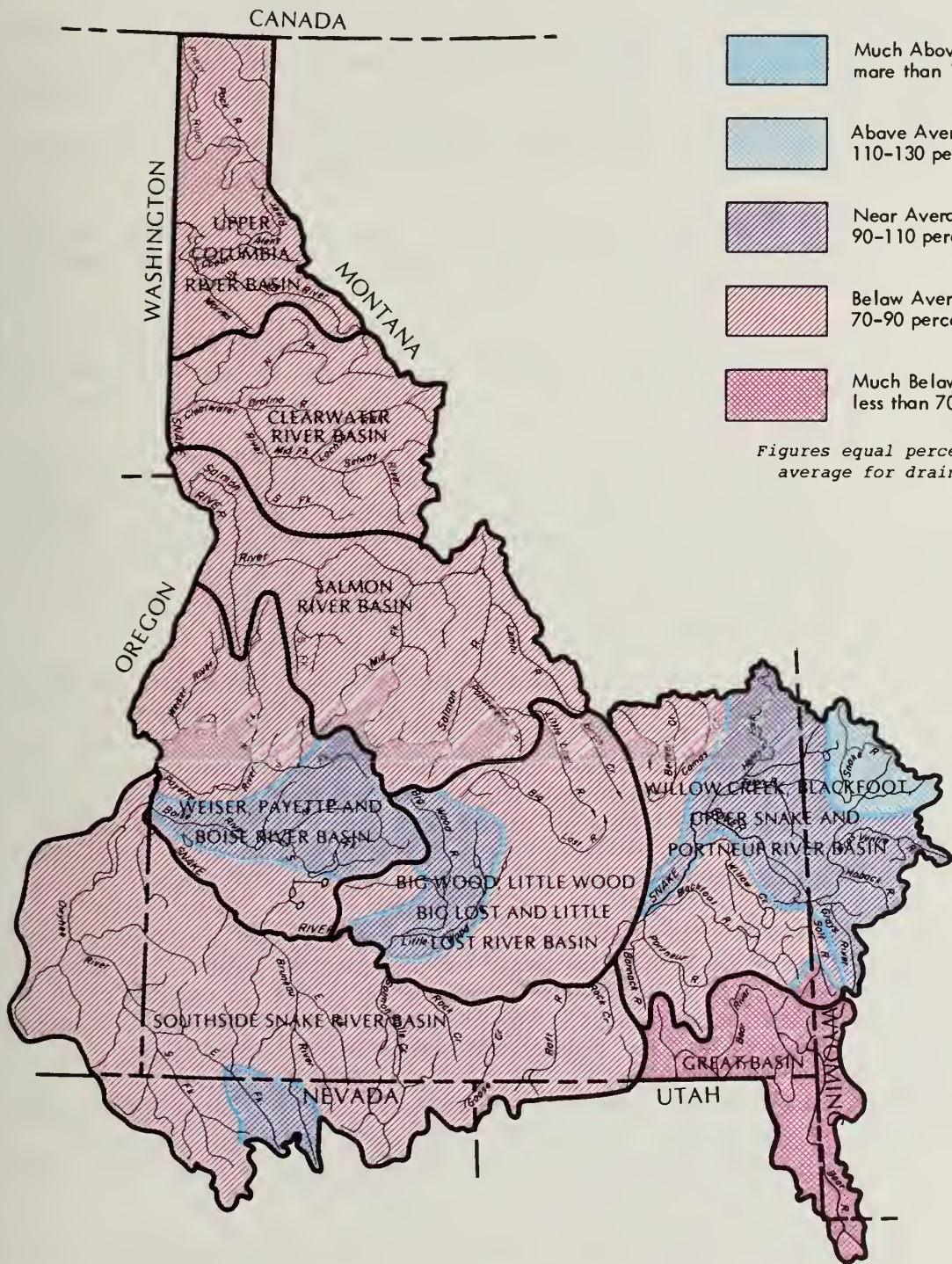
STREAMFLOW PROSPECTS
IDAHO



LEGEND



Figures equal percent of
average for drainage.



PROPOSED CHANGES TO WSOR FOR 1990:
YOU HAVE BEEN HEARD . . .

A recent evaluation of the Snow Survey and Water Supply Forecasting Program interviewed 200 users of the forecasts. We learned that:

- Users who got their information by accessing our computer were very satisfied;
- Users who depended on the monthly Water Supply Outlook Report needed the information much earlier in the month; and
- The reports contained more information than many users needed.

In summary, we are producing a report that is not doing the job for most users. And we are spending a lot of money on the report.

The state-wide WATER SUPPLY OUTLOOK REPORT will be discontinued. We are proposing three actions for the next water year to better meet your needs:

FIRST, the users' direct access of forecasts by computer will be improved. We will provide better instructions and self-training materials. Also, District Conservationists who have computers will be encouraged to access forecasts and distribute local reports to those users who do not have computer facilities.

SECOND, the SCS state office will prepare individual forecast reports for the major river basins in the state. They will be the same as the reports available on the computer. Users who request it will be on a mailing list to receive one or more of the reports. They will be printed and mailed within a day or two after the basin forecast is completed and available on the computer.

THIRD, for users who are interested in the forecasts for their historical value rather than for decision-making, an annual summary will be provided. A West-Wide Report will continue to be available, published jointly with the National Weather Service.

This summer and fall will be spent developing the details of these new procedures. You will be informed prior to next water year's reports, and new mailing lists will be prepared.

Please call us or write if you have any questions.

SCS - Snow Surveys
3244 Elder Street, Rm 124
Boise, Idaho 83705
(208) 334-1614

GENERAL OUTLOOK

SUMMARY:

WARM TEMPERATURES AND DRY CONDITIONS DOMINATED APRIL'S WEATHER, RESULTING IN EARLY RUNOFF AND A DECREASE IN THE MOUNTAIN SNOWPACK. WITH CONTINUED WARM TEMPERATURES, IDAHO'S SNOWPACK WILL BE DEPLETED BY EARLY JUNE. MOST RESERVOIRS ARE STILL EXPECTED TO FILL, BUT STREAMFLOWS WILL MOST LIKELY DROP TO LOW FLOW CONDITIONS 2-3 WEEKS EARLIER THAN NORMAL. WATER SUPPLIES SHOULD BE ADEQUATE FOR MOST USERS ACROSS THE STATE, WITH THE POSSIBLE EXCEPTION OF SOME BASINS IN SOUTHEASTERN IDAHO.

SNOWPACK:

Snow surveys taken at selected sites near May 1 show the mountain snowpack is well into the melt phase. In the northern half of the state, approximately 25-35% of the winter's snow accumulation has melted since April 1. The southern half of the state has lost 35-45% of the winter accumulation, and most lower elevation basins are nearly depleted of their snowpack. Basin-wide snowpacks in the Idaho panhandle now range from 75 to 89% of normal. In the central part of the state, snowpacks range from 64 to 93% of normal in the higher elevation basins and 52 to 64% in the lower elevation basins. Eastern Idaho and western Wyoming snowpacks range from 86 to 109% in the high basins, while the lower basins report only 18 to 58% of normal snowpack remaining. Basins on the southside of the Snake River report 47 to 92% of normal snowpacks, except on the Owyhee basin where the snowpack is nearly depleted. Snowpack conditions in the southeast corner of Idaho range from 44 to 69% of normal. With snowmelt 2 to 3 weeks ahead of normal, warm temperatures during May will deplete nearly all the remaining snowpack by June 1.

RESERVOIRS:

The early snowmelt produced above average runoff on most streams during April, improving storage significantly in most reservoirs. Reservoir storage levels in 27 key reservoirs range from a low of 64% of average (32% of capacity) in Oakley Reservoir to 131% of average (78% of capacity) in Lucky Peak reservoir. Jackson Lake is an exception, reporting only 44% of normal storage and 26% of capacity. The combined storage for 27 major Idaho reservoirs is 102% of normal and 72% of capacity. May-July streamflow projections indicate most major reservoir systems should fill or nearly fill to capacity prior to the end of the runoff season. Exceptions include Salmon Falls Creek, Oakley, Blackfoot, and Montpelier Creek reservoirs which are not expected to fill. Magic Reservoir may not fill, depending upon the timing of irrigation demands. Jackson Lake may also fall short of filling due to the storage restrictions currently imposed on the structure.

STREAMFLOW:

Most streams produced above average flows during April as a result of the early snowmelt. Streamflows for the remainder of the season, however, are expected to range from slightly below to well below normal in all areas of the state except in the upper Snake where near normal volumes are anticipated. May-Sept streamflow forecasts range from 57% of normal on Montpelier Creek in southeast Idaho to 103% on the Henrys Fork near Ashton. Forecasts in northern Idaho range from 76 to 88% of average. Central Idaho streams are forecast to be slightly below normal, ranging from 82% on the Little Lost to 94% on the Big Wood nr Bellevue. Forecasts in eastern Idaho are generally near normal, except on the Portneuf which is forecast at only 74%. Basins on the southern Idaho border are expected to produce 79 to 87% of normal flows. The Great Basin in southeast Idaho has the lowest volume forecasts, ranging from 55 to 57% of average.

PRECIPITATION:

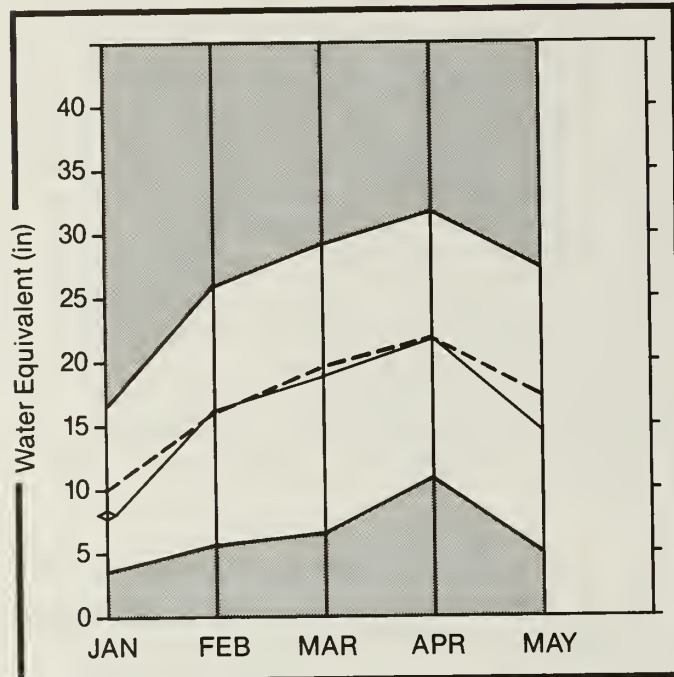
The month of April brought a return to warm and dry conditions across almost the entire state. Precipitation was well below normal for Idaho with only a few exceptions. Porthill was the only valley station above normal with 120% of average; several stations were in the 90th percentile. A breakdown of the state shows the north generally receiving 50 to 60% of normal with extremes from 32 to 120%. Central Idaho show a wide variance from 18% at Salmon to 83% at Fenn Ranger Station. Southwest Idaho was in the 40 to 50% of average range, and the south central portion reported 60 to 80%. Southeast Idaho ranged from 99% at Island Park and 91% at Idaho Falls to just 30 to 40% for the remainder of the area. The state as a whole received 62% of normal. Temperatures were well above normal with Lewiston averaging 5.9 degrees above average for the month. The state as a whole departed nearly 4 degrees from normal.

RECREATIONAL OUTLOOK:

Warm, dry weather during April has provided excellent early season boating opportunities, especially on Idaho's southwest desert rivers. As these streams recede to low flow conditions in late May, river runners will focus on the North and Central Idaho mountain rivers. With snowmelt beginning 2-3 weeks earlier than normal, access roads will soon be snow free, and outdoor enthusiasts can enjoy the advantages of moderate flow levels earlier than normal. The Salmon, Snake, Selway, and Lochsa should have plenty of water to ensure excellent floating opportunities throughout the summer.

Upper Columbia Basin

Mountain snowpack* (inches)



*Based on selected stations

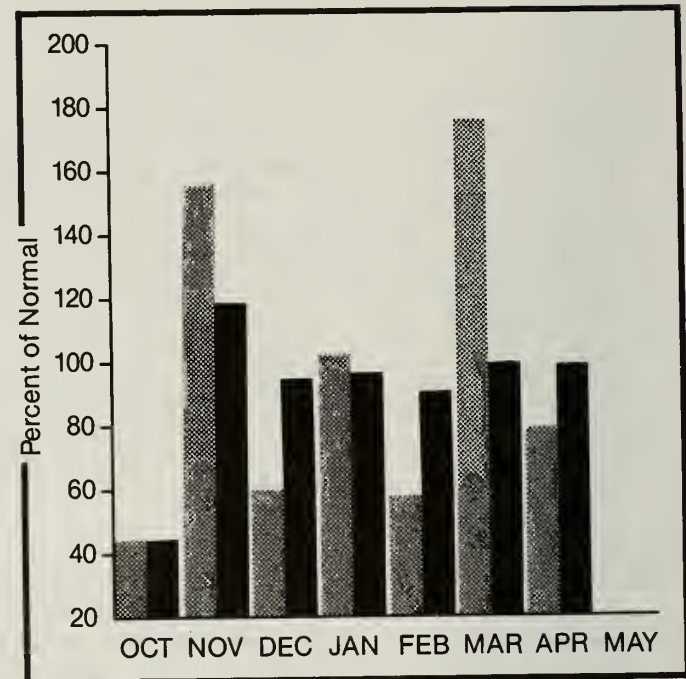
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

May 1 snow surveys indicate spring snowmelt is well underway throughout the basin. Snowmelt began in early April - about a month earlier than normal - and remains 2 to 3 weeks ahead of schedule. The early melt has caused basin-wide snowpack figures to drop 10 to 20% from the April 1 figures, and all basins now report below normal snowpack remaining. Current snowpack figures range from 75% of normal on the St. Joe to 88% on the Moyie River basin. April streamflow volumes were above to well above average as a result of the early melt, and lake and reservoir levels are near or above normal for May 1. Coeur d'Alene Lake is 1 to 2 feet above the summer recreation pool. May-Sept streamflow volumes are now expected to be slightly below normal, ranging from 85 to 95%. Continued warm temperatures should deplete most of the remaining snow by late May or early June.

UPPER COLUMBIA RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
KOOTENAI at Leona (2)	MAY-SEP MAY-JUL	7290 6200	95 94			8750 7450	5830 4950	7685 6585
CLARK FORK at Whitehorse Rapids (2)	MAY-SEP MAY-JUL	10200 9110	87 86			11700 10500	8670 7740	11764 10538
PEND OREILLE LAKE inflow (2)	MAY-SEP MAY-JUL	11200 10100	86 86			13300 12000	9000 8110	12960 11680
PRIEST nr Priest River (2)	MAY-SEP	630	88			795	475	715
COEUR D'ALENE at Enaville	MAY-SEP MAY-JUL	475 430	87 85			625 570	325 290	543 503
SPOKANE nr Post Falls (2)	MAY-SEP MAY-JUL	1700 1600	87 86	1760 1660	1660 1540	2170 2050	1210 1140	1957 1859
ST. JOE at Calder	MAY-SEP MAY-JUL	855 785	85 84		830 740	1050 965	665 605	1008 938

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	XX USEABLE STORAGE THIS YEAR	XX USEABLE STORAGE LAST YEAR	XX USEABLE STORAGE AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	% OF AVERAGE
HUNGRY HORSE	3451.0	1527.0	1019.0	2040.0	Kootenai ab Bonners Ferry	50	141	89
FLATHEAD LAKE	1791.0	941.0	864.0	929.0	Movie River	2	122	88
PEND OREILLE	1561.2	952.5	953.4	920.7	Pend Oreille River	151	137	84
NOXON RAPIDS	335.0	318.2	275.6	186.3	Clark Fork River	103	128	78
COEUR D'ALENE	291.2	391.2	248.2	317.2	Priest River	6	148	79
PRIEST LAKE	97.7	93.8	88.8	74.4	Rathdrum Creek	0	0	0
					Hayden Lake	0	0	0
					Coeur d'Alene River	9	182	79
					St. Joe River	8	117	75
					Spokane River	17	138	77
					Palouse River	0	0	0

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.

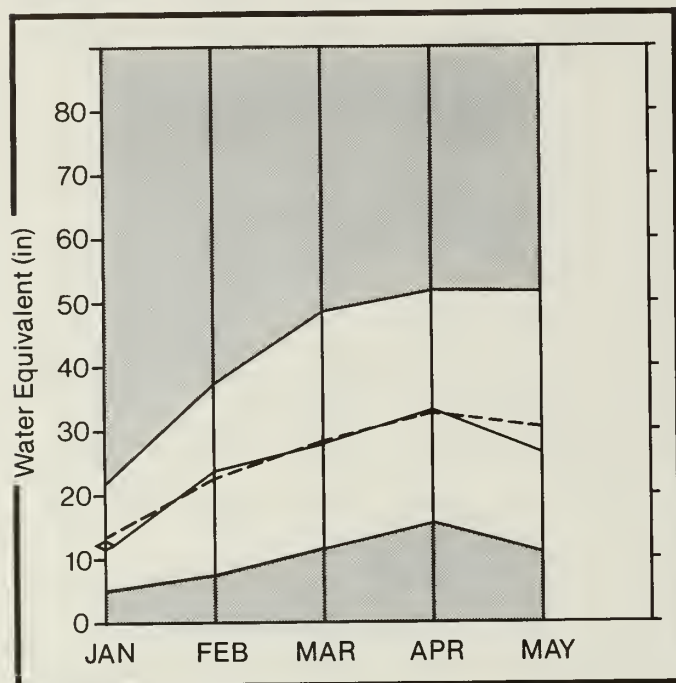
REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.

(1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.

(2) - Corrected for upstream diversions or changes in reservoir storage.

Clearwater River Basin

Mountain snowpack* (inches)



*Based on selected stations

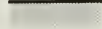
Maximum



Average



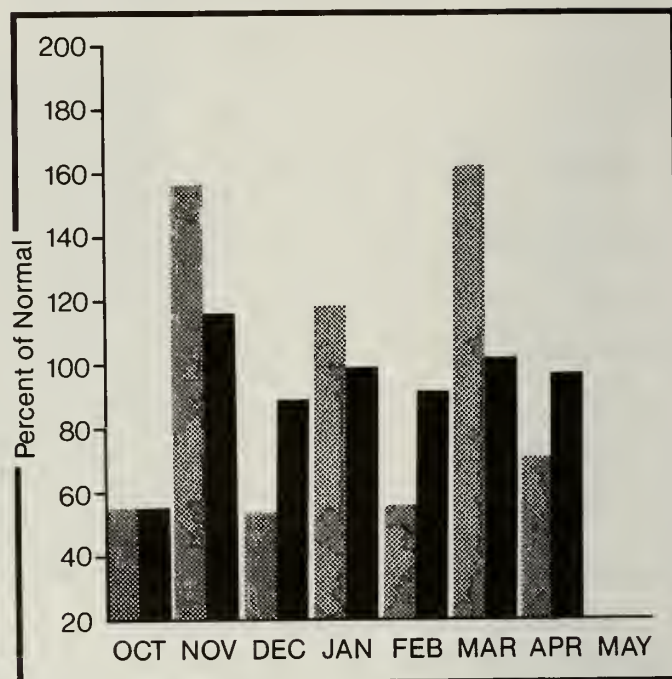
Minimum



Current



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Snowmelt in the basin began about a month early and continues to be 2 to 3 weeks ahead of normal. The early melt is reflected in the May 1 snowpack figures, which now show snowpack conditions to be below normal, ranging from 82 to 88% of average. Continued warm temperatures during May should deplete most of the remaining snow by early June. April streamflow volumes were above normal, raising Dworshak reservoir storage to 115% of average for May 1. May-Sept volume forecasts indicate streamflows should be below normal for the period, ranging from 76 to 81%. Peak flows are expected to occur in mid to late May on the major rivers.

For more information contact your local Soil Conservation Service office.

CLEARWATER RIVER BASIN

STREAMFLOW FORECASTS

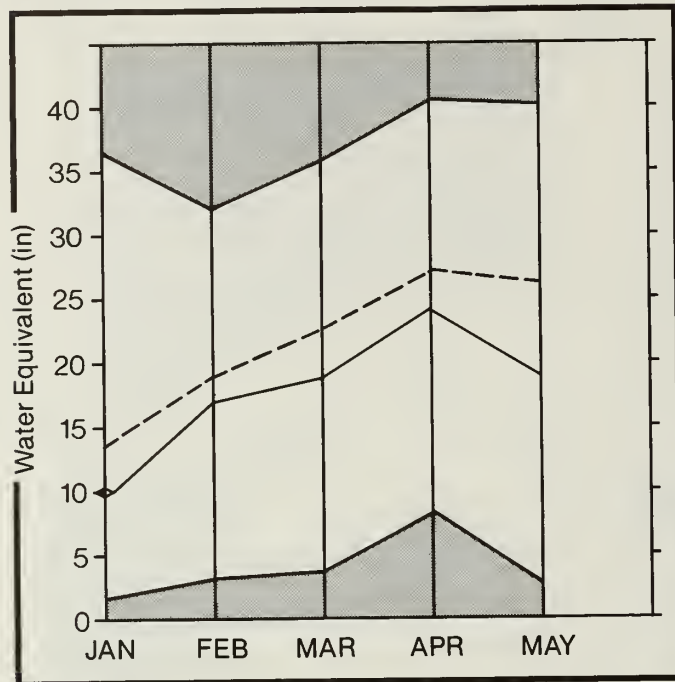
FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
DWORSHAK RESERVOIR inflow	MAY-SEP	1800	76			2230	1370	2366
	MAY-JUL	1620	74			2010	1230	2179
CLEARWATER at Orofino	MAY-SEP	3500	81			4490	2460	4318
CLEARWATER at Spalding	MAY-SEP	5430	80			6790	4070	6787
	MAY-JUL	5010	79			6280	3750	6325

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
DWORSHAK	3467.8	2609.7	2499.8	2276.0	North Fork Clearwater	14	131 80
					Lochsa River	6	123 86
					Selwav River	7	118 88
					Clearwater River	23	127 82

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Salmon River Basin

Mountain snowpack* (inches)



*Based on selected stations

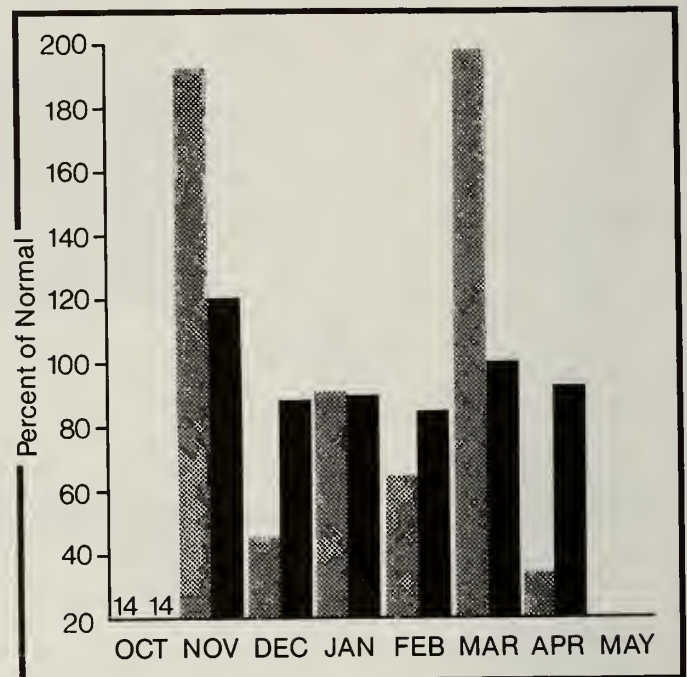
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

May 1 snow surveys indicate the winter snowpack is well into the spring melt cycle. Snowmelt began in early April and continues to be 2 to 3 weeks ahead of normal. The early melt has caused basin-wide snowpack figures to drop 20 to 30% from the April 1 figures and now range from 73 to 77% of normal. April streamflows were above normal, ranging from 111% of average for the Salmon at Salmon to 126% for the Salmon at Whitebird. May-Sept volume streamflow forecasts indicate flows for the remainder of the season will be below normal. Continued warm temperatures will deplete most of the remaining snowpack by early June, and peak flows are expected to occur in mid May.

For more information contact your local Soil Conservation Service office.

SALMON RIVER BASIN

STREAMFLOW FORECASTS

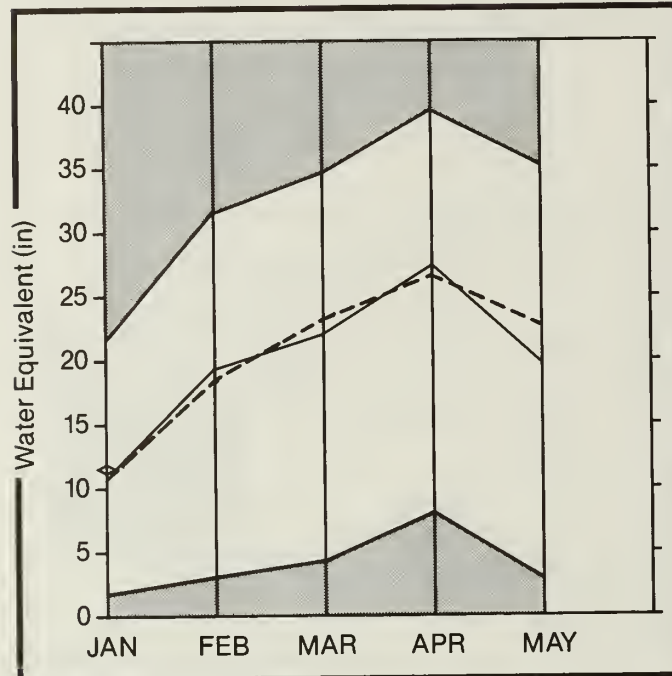
FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
SALMON at Salmon	MAY-SEP	835	85			1140	520	984
SALMON at White Bird	MAY-SEP	5270	83			6350	4120	6363
	MAY-JUL	4680	82			5650	3660	5678

RESERVOIR STORAGE					(1000AF)	WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE		** USEABLE STORAGE **			WATERSHED	NO.	THIS YEAR AS % OF	
	CAPACITY		THIS	LAST	AVG.		COURSES	-----	
			YEAR	YEAR			AVG'D	LAST YR.	AVERAGE
						Salmon River ab Salmon	7	133	73
						Lemhi River	7	109	76
						Salmon River Total	26	144	77

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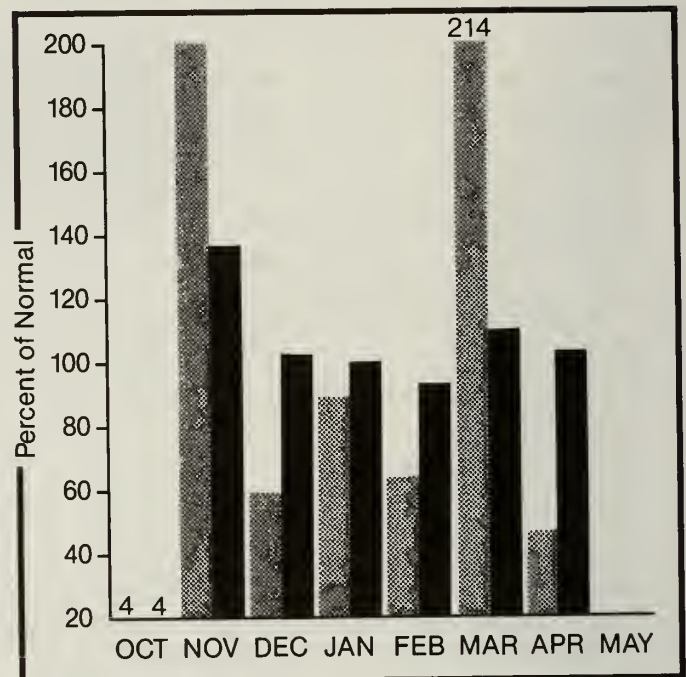
Weiser, Payette, and Boise River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum

Average

Minimum

Current

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

The May 1 snow surveys show the winter snowpack is well into the spring melt cycle, with snowmelt beginning 2 to 3 weeks earlier than normal. The May 1 snowpack figures reflect the early melt, showing snowpack conditions to be below normal. Snowpacks range from 82 to 93% of average in the higher elevation basins while the lower elevation Weiser basin reports only 64% of normal snowpack remaining. Most of the snow in the low elevation basins is now depleted. April streamflow volumes were above normal, allowing reservoir operators to store significant amounts of water during the month. Current storage levels range from 84 to 131% of normal and all major reservoirs are expected to fill. May-Sept streamflow projections indicate flows will be slightly below normal for the remainder of the season, ranging from 87 to 93% of average. Basins with storage facilities should have good water supplies for the 1989 season, while systems without storage may experience some late season shortages due to the early runoff.

WEISER, PAYETTE, AND BOISE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
WEISER nr Weiser	MAY-JUL	235	86			330	143	272
NF PAYETTE at Cascade (2)	MAY-SEP	425	89			515	340	479
	MAY-JUL	390	88			475	310	441
NF PAYETTE nr Banks (2)	MAY-SEP	535	89			650	420	601
	MAY-JUL	490	88			595	385	557
PAYETTE nr Horseshoe Bend	MAY-SEP	1350	87			1610	1090	1551
	MAY-JUL	1220	87			1460	980	1406
SF PAYETTE at Lowman	MAY-SEP	420	91			505	335	463
	MAY-JUL	365	90			440	290	404
DEADWOOD RESERVOIR inflow	MAY-JUL	111	86			133	89	129
BOISE nr Twin Springs (1)	MAY-SEP	560	93	560	540	655	465	602
	MAY-JUL	500	92	500	495	585	415	544
BOISE nr Boise (1)	MAY-SEP	1180	91	1220	1140	1400	1000	1295
	MAY-JUL	1070	91	1120	1020	1270	905	1175
SF BOISE at Anderson Ranch Dam (1)	MAY-SEP	460	91	460	455	550	370	507
	MAY-JUL	420	90	435	400	505	335	466

RESERVOIR STORAGE

(1000AF)

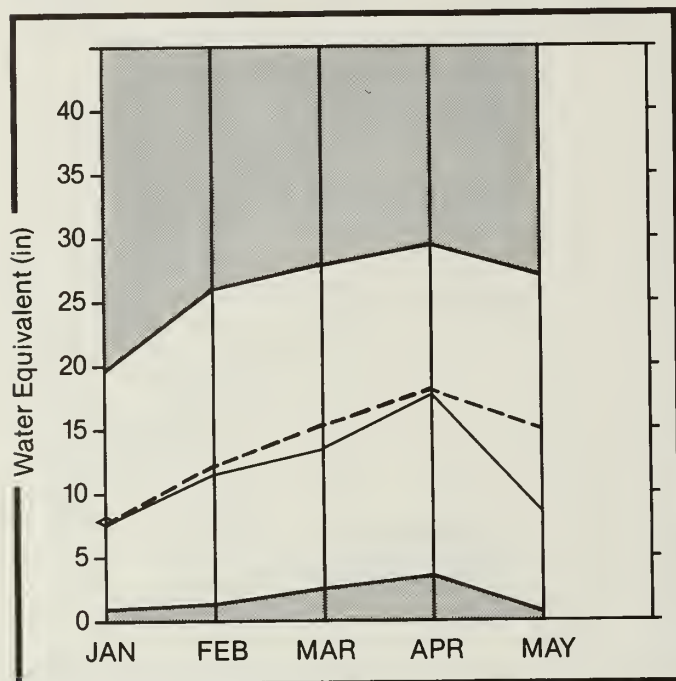
WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
MANN CREEK	11.3	11.2	8.6	10.4	Mann Creek	1	0	85
CASCADE	703.2	526.9	442.5	411.7	Weiser River	4	943	64
DEADWOOD	162.0	88.3	89.4	101.1	North Fork Payette	9	266	83
ANDERSON RANCH	464.2	276.2	180.0	327.2	South Fork Payette	7	201	82
ARROWROCK	286.6	209.6	116.0	214.9	Payette River Total	16	233	83
LUCKY PEAK	307.0	240.4	257.6	182.9	Middle & North Fork Boise	7	158	91
LAKE LOWELL (DEER FLAT)	177.0	147.2	127.3	169.8	South Fork Boise River	6	162	93
					Boise River Total	15	188	91
					Canvon Creek	0	0	0

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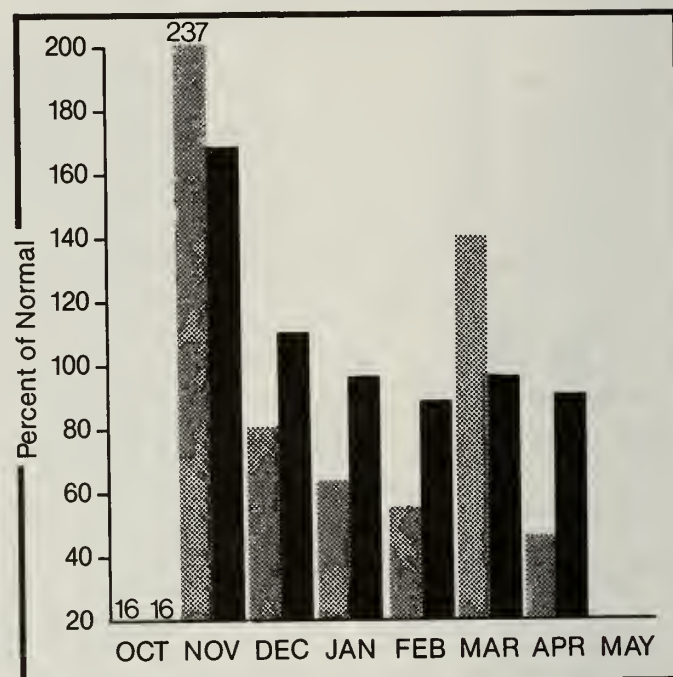
Big Wood, Little Wood, Big Lost, and Little Lost River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)

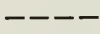


*Based on selected stations

Maximum



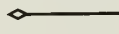
Average



Minimum



Current



Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Snowmelt in the basin began a month early and continues to be 2 to 3 weeks ahead of normal. The early snowmelt coupled with below average precipitation during April has resulted in below normal snowpacks on May 1. Basin-wide snowpacks now range from 52% of average on the Little Wood and Little Lost River basins to 79% on the Big Wood mainstem. Most of the low elevation snowpack is depleted, and warm temperatures during May should deplete the remaining snow by late May or early June. April streamflows were above normal and allowed reservoir levels to be significantly improved. Magic Reservoir gained over 100,000 ac. ft. of storage during April, and contents are now 85% of average (75% of capacity). The timing of irrigation demands could determine whether Magic Reservoir fills. May-Sept streamflows are forecast to be below normal for the remainder of the season, ranging from 82 to 94%, with peak flows expected to occur in mid May. Water supplies should be adequate to meet user needs for the 1989 season.

BIG WOOD, LITTLE WOOD, BIG LOST, AND LITTLE LOST RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
BIG WOOD nr Bellevue	MAY-SEP	178	94			225	129	190
	MAY-JUL	165	94			210	125	175
MAGIC RESERVOIR inflow	MAY-SEP	215	91			290	139	237
	MAY-JUL	200	90			270	129	221
LITTLE WOOD nr Carey	MAY-SEP	72	91	78	67	92	52	79
	MAY-JUL	64	90	69	59	82	46	71
BIG LOST at Howell Ranch nr Chilly	MAY-SEP	181	87			235	127	208
	MAY-JUL	157	87	161	153	205	110	181
BIG LOST b1 Mackay Reservoir (2)	MAY-SEP	158	87	160	156	215	100	182
	MAY-JUL	129	87			176	82	148
LITTLE LOST b1 Wet Ck	MAY-SEP	29	82	30	27	40	18.4	35
	MAY-JUL	23	83	24	21	31	14.7	28
LITTLE LOST nr Howe	MAY-SEP	32	84	33	31	43	21	38
	MAY-JUL	23	82	24	22	31	14.6	28

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
MAGIC	191.5	142.8	57.6	167.7	Big Wood ab Magic	9	176	79
LITTLE WOOD	30.0	27.8	26.7	24.6	Camas Creek	2	0	62
CAREY VALLEY		NO REPORT			Big Wood Total	11	188	77
MACKAY	44.5	28.2	31.8	34.2	Little Wood River	3	310	52
					Fish Creek	0	0	0
					Big Lost River	5	141	64
					Little Lost River	4	128	52

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.

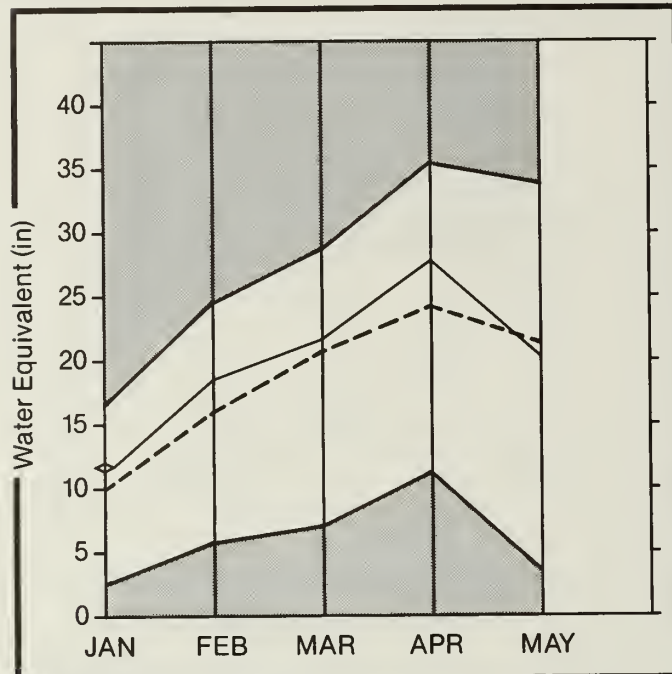
REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.

(1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.

(2) - Corrected for upstream diversions or changes in reservoir storage.

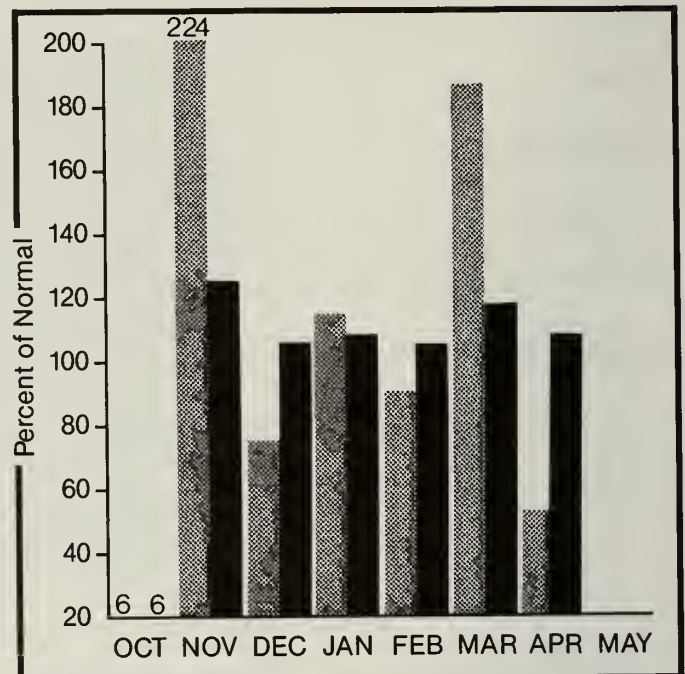
Willow Creek, Blackfoot, Upper Snake, and Portneuf River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum

Average

Minimum

Current

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

May 1 snow surveys indicate spring snowmelt is about 2 weeks ahead of normal for this time of year. The early melt coupled with sparse precipitation in April has caused higher elevation snowpack figures to drop 10-20% from the April 1 figures and lower elevation basins to drop 40-60%. May 1 snowpacks, however, remain near or slightly above normal in the Henrys Fork, Teton, and Upper Snake River basins, ranging from 97 to 109%. Lower elevation snowpacks are now well below normal, ranging from only 18% of average on the Salt River to 58% on the Portneuf and Willow Creek basins. May-Sept streamflows are forecast to be near normal on the high elevation basins and below normal on the lower basins. Forecasts range from 74% of normal on the Portneuf to 103% on the Teton and Henrys Fork Rivers. Reservoir storage levels have improved, and most reservoirs are expected to fill with the exception of Blackfoot Reservoir. Jackson Reservoir also may not fill due to the storage restrictions currently imposed on the structure. Water supplies should be good in most basins. Water users on the Portneuf, however, could experience some late summer shortages due to the early melt and lack of storage facilities.

WILLOW CREEK, BLACKFOOT, UPPER SNAKE, AND PORTNEUF RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
HENRYS FORK nr Ashton (2)	MAY-SEP	660	103	680	640	705	615	639
	MAY-JUL	460	102	480	440	490	430	449
HENRYS FORK nr Rexburg (2)	MAY-SEP	1410	102	1440	1380	1630	1220	1389
	MAY-JUL	1070	101	1080	1060	1240	920	1055
FALLS nr Squirrel	APR-JUL	380	102			430	330	373
TETON ab S Leigh Ck nr Driggs	MAY-SEP	175	102	177	168	215	137	172
	MAY-JUL	125	101	130	120	152	98	123
TETON nr St. Anthony	MAY-SEP	445	103			495	395	434
	MAY-JUL	350	102			390	310	342
SNAKE nr Moran (1)	APR-SEP	1000	113	1020	990	1100	895	888
PALISADES RESERVOIR inflow (1)	APR-SEP	4100	106	4140	4060	4520	3680	3852
SNAKE nr Heise (2)	MAY-SEP	3850	102	3930	3770	4530	3170	3790
	MAY-JUL	3200	101	3300	3100	3770	2630	3173
SNAKE nr Blackfoot (2)	MAY-SEP	5350	102	5350	5190	6080	4670	5243
	MAY-JUL	4230	102	4270	4190	4810	3690	4152
PORTNEUF at Topaz	MAY-SEP	58	74			81	35	78
	MAY-JUL	42	74	45	39	59	25	57

RESERVOIR STORAGE

(1000AF)

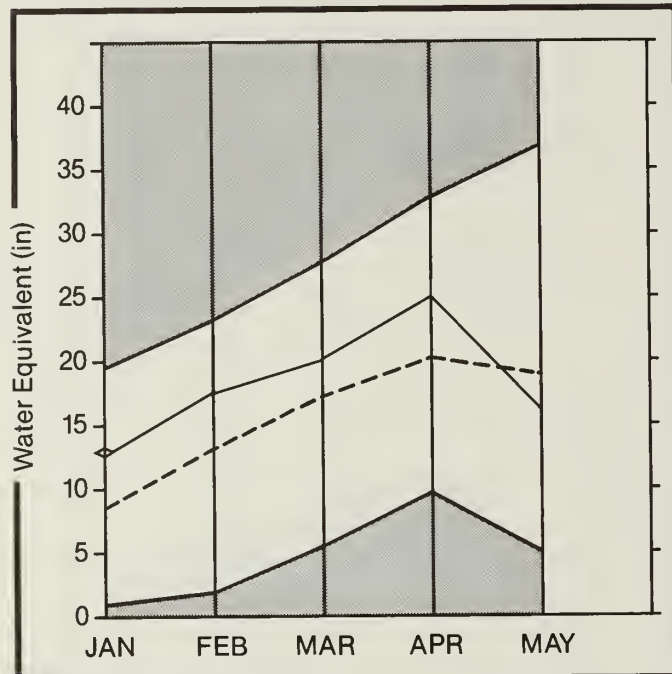
WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
ISLAND PARK	127.6	111.0	136.0	125.7	Camas-Beaver Creeks	3	2013	79
GRASSY LAKE	15.2	10.4	10.3	11.5	Henrys Fork River	10	168	109
JACKSON LAKE	824.7	218.2	156.7	494.3	Teton River	9	144	97
PALISADES	1357.0	955.0	1119.1	871.8	Snake above Palisades	20	137	86
AMERICAN FALLS	1700.0	1556.5	1641.8	1542.9	Snake above Jackson Lake	3	146	108
BROWNLEE	975.3	548.7	895.3	515.9	Gros Ventre River	2	136	102
BLACKFOOT	348.7	202.0	279.1	274.6	Greys River	4	119	88
HENRY'S LAKE	90.4	73.3	85.2	81.8	Salt River	6	236	18
RIRIE	96.5	78.9	66.4	63.5	Willow Creek	7	373	58
					Blackfoot River	3	826	36
					Portneuf River	2	0	58
					Toponce Creek	0	0	0

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.
 REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.
 (1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.
 (2) - Corrected for upstream diversions or changes in reservoir storage.

Southside Snake River Basin

Mountain snowpack* (inches)



*Based on selected stations

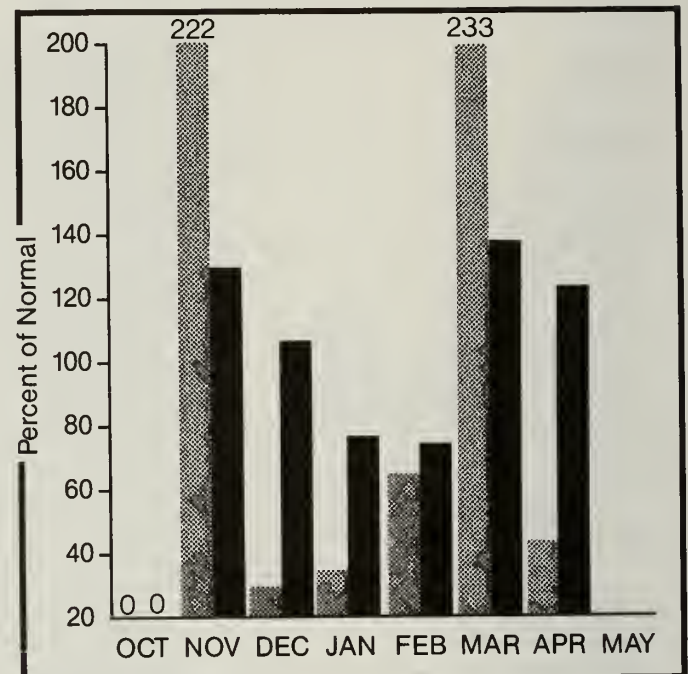
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

Snowmelt in the basin began about a month early and continues to be 2 to 3 weeks ahead of normal. Low elevation snowpacks have completely melted and mid-elevation snowpacks are nearly depleted. Basin-wide snowpack figures range from 47 to 92% of normal. High elevation sites in the Jarbidge Range report slightly below normal snowpacks remaining on May 1. The early snowmelt produced above average streamflow volumes for April. Streamflows for the remainder of the season, however, are expected to be below normal, with May-Sept volume forecasts ranging from 79% for Oakley Reservoir inflow to 87% for Owyhee Reservoir inflow. Reservoir storage ranges from 64% of normal in Oakley Reservoir to 116% in Owyhee Reservoir. Water supplies should be adequate to meet most user needs, but some late summer shortages may occur on the Oakley system and on basins without storage facilities.

SOUTHSIDE SNAKE RIVER BASIN

STREAMFLOW FORECASTS

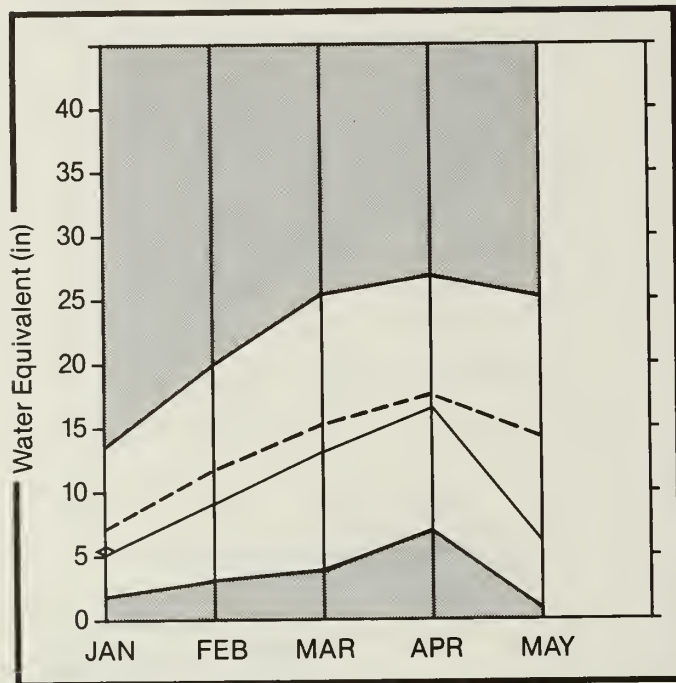
FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
OAKLEY RESERVOIR inflow	MAY-SEP	20	79			28	11.9	25
	MAY-JUL	18.0	81			25	10.9	22
SALMON FALLS CK nr San Jacinto	MAY-SEP	54	81	59	49	78	31	67
	MAY-JUL	50	81	56	45	72	28	62
BRUNEAU nr Hot Spring	MAY-SEP	155	82			225	87	188
	MAY-JUL	145	82	149	145	210	82	176
OWYHEE nr Gold Ck (2)	MAY-JUL	14.2	101	14.3	13.9	18.5	9.9	14.0
OWYHEE nr Owyhee (2)	APR-JUL	95	110	104	86	122	68	86
OWYHEE nr Rome (2)	MAY-JUL	155	82	159	151	240	70	189
OWYHEE RESERVOIR inflow (1)	MAY-SEP	225	87	250	200	330	121	260
	MAY-JUL	186	80	205	165	280	93	232

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE	
OAKLEY	77.4	25.0	21.4	39.2	Raft River	1	223	92
SALMON FALLS	182.6	69.5	60.4	81.4	Goose-Trapper Creeks	1	163	101
OWYHEE	715.0	706.9	273.6	606.9	Salmon Falls Creek	11	148	63
					Bruneau River	7	138	77
					Owyhee River	6	264	67

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.
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Great Basin

Mountain snowpack* (inches)



*Based on selected stations

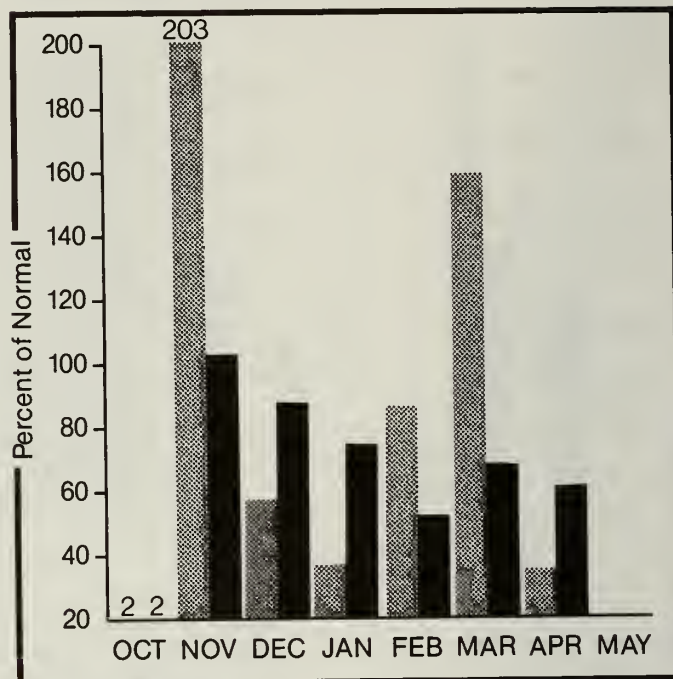
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WATER SUPPLY OUTLOOK:

May 1 snow surveys indicate the winter snowpack is well into the spring melt phase, and low elevation basins are nearly depleted of their winter snow. Spring melt began about a month early and remains 2 to 3 weeks ahead of normal. Basin-wide snowpacks currently range from 44 to 69% of normal. Although the snowmelt has been early, April streamflows remained near or below normal indicating the dry soils in the basin have absorbed a significant amount of the snowmelt. May-Sept streamflow projections indicate streamflows will be below to well below normal for the remainder of the season. Storage in Montpelier Creek Reservoir is currently only 55% of capacity and is not expected to fill. Water supplies could be marginal on Montpelier Creek and in basins without storage facilities.

GREAT BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
BEAR RIVER near Harer	APR-SEP	188	61			305	70	310
MONTPELIER CK nr Montpelier	MAY-SEP	6.4	57			10.2	2.6	11.3
CUB RIVER nr Preston	MAY-SEP	28	55	30	26	46	9.6	51
	MAY-JUL	27	59	29	25	44	10.4	46

RESERVOIR STORAGE					(1000AF)	WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF		
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE	
BEAR LAKE	1421.0	896.8	1096.0	1059.0	Bear River (above Harer)	12	122	64	
MONTPELIER CREEK	4.0	2.2	2.5	2.3	Montpelier Creek	5	155	47	
					Mink Creek	2	154	52	
					Cub River	3	150	69	
					Malad River	0	0	0	

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.
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SNOW DATA MEASUREMENTS

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
UPPER COLUMBIA BASIN							CLEARWATER BASIN						
WATERSHED I							WATERSHED II						
ABOVE BURKE	4100	5/01/89	—	6.8E	8.0	18.6	BREEZY SADDLE	5010	4/26/89	36	16.2	12.0	26.9
BEAR MOUNTAIN	5400	4/25/89	105	54.7	40.4	63.2	BUCK MEADOWS	5650	4/28/89	63	30.7	20.0	27.1
BENTON MEADOW	2370	4/28/89	0	.0	.0	.0	CAYUSE AIRSTRIP	3500	4/26/89	0	.0	.0	.7
BENTON SPRING	4920	4/28/89	25	11.5	1.7	15.4	COOL CREEK	6250	4/26/89	113	47.2	37.2	53.2
BREEZY SADDLE	5010	4/26/89	36	16.2	12.0	26.9	COOL CREEK PILLOW	6280	5/01/89	—	48.7	39.1	52.0
COPPER RIDGE	4820	4/28/89	—	18.3E	3.8	22.2	COOLWATER MOUNTAIN	6030	4/28/89	92	40.5	29.8	35.8
EAST RAGGED SADDLE	3740	4/30/89	0	.0	—	16.6	CRATER MEADOWS	5960	4/26/89	87	41.3	31.1	47.0
FORTY-NINE MEADOWS	4830	4/26/89	—	15.1E	11.6	25.1	CRATER MDWS PILLOW	5960	5/01/89	—	42.1	29.3	49.9
FOURTH OF JULY SUM	3200	5/01/89	0	.0	.0	.4	CROOKED FORK	3610	5/01/89	0	.0	.0	2.6
GRANITE PEAK	6000	4/26/89	78	32.4	30.6	46.1	ELK BUTTE	5550	5/01/89	—	24.1E	10.3	31.5
HUMBOLDT GULCH	4250	4/28/89	8	3.8	.0	13.0	ELK BUTTE PILLOW	5550	5/01/89	—	32.6	18.4	38.7
HUMBOLDT GLCH PILLOW	4250	5/01/89	—	.0	.0	10.1	FISH LAKE AIRSTRIP	5650	4/28/89	70	31.7	30.4	40.2
LOOKOUT	5140	4/28/89	60	24.6	17.2	32.7	FORTY-NINE MEADOWS	4830	4/26/89	—	15.1E	11.6	25.1
LOOKOUT PILLOW	5140	5/01/89	—	22.3	14.6	31.3	GOAT LAKE	6500	4/26/89	95	43.4	39.5	50.9
LOST LAKE	6110	4/26/89	107	47.1	39.1	60.1	GRANITE PEAK	6000	4/26/89	78	32.4	30.6	46.1
LOST LAKE PILLOW	6110	5/01/89	—	55.7	38.4	66.8	HEMLOCK BUTTE	5810	4/26/89	96	45.4	26.4	50.7
LOWER SANDS CREEK	3120	4/27/89	—	21.9E	7.6	16.3	HEMLOCK BUTTE PILLOW	5810	5/01/89	—	46.6	29.0	53.0
MOSQUITO RIDGE	5200	5/01/89	—	29.1E	17.3	36.6	HOODOO BASIN PILLOW	6050	5/01/89	—	40.5	35.0	49.6
MOSQUITO PILLOW	5200	5/01/89	—	29.2	17.0	37.0	HOODOO CREEK	5900	4/29/89	79	36.5	35.5	49.3
SCHWEITZER BASIN	6090	5/01/89	84	41.9	36.1	51.1	LOLO PASS	5240	5/01/89	41	20.0	15.0	28.3
SCHWEITZER BN PILLOW	6090	5/01/89	—	43.6	39.6	53.3	LOLO PASS PILLOW	5240	5/01/89	—	21.6	14.2	29.5
SCHWEITZER BOWL	4800	5/01/89	28	14.3	5.0	24.2	LOST LAKE	6110	4/26/89	107	47.1	39.1	60.1
SCHWEITZER RIDGE	6200	5/01/89	82	39.8	31.9	48.8	LOST LAKE PILLOW	6110	5/01/89	—	55.7	38.4	66.8
SHERWIN	3200	5/01/89	14	6.9	.0	4.6	MOUNTAIN MEADOWS	6360	4/28/89	43	17.0	16.5	23.5
SHERWIN PILLOW	3200	5/01/89	—	6.8	.0	6.8	MOUNTAIN MDWS PILLOW	6360	5/01/89	—	21.9	21.3	27.4
SKITWISH RIDGE	5110	4/27/89	54	27.0	13.0	28.8	NEZ PERCE PASS	6570	4/28/89	25	10.4	9.2	15.5
SMITH CREEK	4800	4/30/89	76	37.2	—	45.3	PIERCE R.S.	3080	5/01/89	0	.0	.0	—
SUNSET	5540	5/01/89	—	26.9E	20.3	32.8	SAVAGE PASS	6170	5/01/89	54	22.4	20.0	27.9
TWIN SPIRIT DIVIDE	3480	4/20/89	0	.0	—	—	SAVAGE PASS PILLOW	6170	5/01/89	—	22.6	18.6	29.6
							SHANGHAI SUMMIT	4570	4/26/89	48	23.3	4.6	21.1
							SHANGHAI SUM PILLOW	4570	5/01/89	—	18.9	.8	22.4
							SHERWIN	3200	5/01/89	14	6.9	.0	4.6
							SHERWIN PILLOW	3200	5/01/89	—	6.8	.0	6.8
							TWIN LAKES	6510	4/27/89	78	37.0	34.0	45.2
							WEBB CREEK	4720	4/28/89	0	.0	—	—
SALMON BASIN							WATERSHED III						
							WEISER, PAYETTE, AND BOISE BASINS						
							WATERSHED IV						
BANNER SUMMIT	7040	4/27/89	58	25.0	14.4	30.0	ATLANTA SUMMIT	7600	4/27/89	75	34.6	22.6	35.6
BANNER SUMMIT PILLOW	7040	5/01/89	—	22.3	12.5	28.2	ATLANTA SUM PILLOW	7580	5/01/89	—	30.0	18.8	33.1
BEAR BASIN	5350	4/27/89	38	16.6	4.0	17.6	ATLANTA TOWNSITE	5370	4/27/89	0	.0	.0	—
BEAR BASIN PILLOW	5350	5/01/89	—	17.8	6.9	19.0	BANNER SUMMIT	7040	4/27/89	58	25.0	14.4	30.0
BIG CREEK SUMMIT	6580	4/26/89	76	35.7	23.5	37.6	BANNER SUMMIT PILLOW	7040	5/01/89	—	22.3	12.5	28.2
BIG CREEK SUM PILLOW	6580	5/01/89	—	31.3	20.0	33.9	BAD BEAR	4940	5/01/89	0	.0	.0	5.0
BOULDER CREEK	5440	5/01/89	—	3.2E	.0	14.6	BEAR BASIN	5350	5/01/89	38	16.6	4.0	17.6
BRUNDAGE MOUNTAIN	7560	5/01/89	—	45.5E	—	49.8	BEAR BASIN PILLOW	5350	5/01/89	—	17.8	6.9	19.0
BRUNO CREEK	7920	5/01/89	32	12.2	9.8	16.3	BEAR SADDLE	6180	5/01/89	—	21.7E	.0	25.6
DEADWOOD SUMMIT	6860	5/01/89	77	36.7	26.5	45.9	BEAR SADDLE PILLOW	6180	5/01/89	—	21.8	.4	24.6
GALENA SUMMIT	8780	4/27/89	47	18.3	14.4	25.8	BIG CREEK SUMMIT	6580	4/26/89	76	35.7	23.5	37.6
GALENA SUMMIT PILLOW	8780	5/01/89	—	16.0	11.5	21.2	BIG CREEK SUM PILLOW	6580	5/01/89	—	31.3	20.0	33.9
GIBBONS PASS	7100	4/26/89	43	19.6	15.8	23.9	BOGUS BASIN	6340	5/01/89	47	24.5	4.3	22.5
LEMHI PASS	7480	4/28/89	7	2.6	3.2	7.2	BOGUS BASIN ROAD	5540	5/01/89	0	.0	.0	.3
LEMHI RIDGE	8100	4/28/89	26	7.6	7.6	10.0	BOULDER CREEK	5440	5/01/89	—	3.2E	.0	14.6
MEADOW LAKE	9150	5/01/89	—	14.2E	14.3	20.9	BRUNDAGE MOUNTAIN	7560	5/01/89	—	45.5E	—	49.8
MEADOW LAKE PILLOW	9150	5/01/89	—	14.3	—	21.2	COUCH SUMMIT	6840	4/30/89	—	9.6E	.0	14.2
MILL CREEK SUMMIT	8800	5/01/89	45	18.0	16.8	24.4	COZY COVE	5380	5/01/89	0	.0	.0	8.7
MILL CREEK ST PILLOW	8800	5/01/89	—	18.9	16.3	22.9	COZY COVE PILLOW	5380	5/01/89	—	1.2	—	—
MOONSHINE	7440	4/27/89	9	2.0	1.4	8.3	CRAWFORD R.S.	4860	4/26/89	0	.0	.0	.2
MOONSHINE PILLOW	7440	5/01/89	—	3.5	3.0	10.6	DEADMAN GULCH	5600	4/29/89	28	13.8	.8	10.6
MOOSE CREEK	6200	5/01/89	29	12.6	7.2	14.4	DEADWOOD AIRSTRIP	5360	5/01/89	—	.0E	.0	7.1
MOOSE CR PILLOW	6200	5/01/89	—	10.9	7.9	14.4	DEADWOOD SUMMIT	6860	5/01/89	77	36.7	26.5	45.9
MORGAN CREEK	7600	5/01/89	9	3.6	3.5	12.5	DOLLARHIDE SUMMIT	8420	4/27/89	61	23.5	16.0	25.0
MORGAN CREEK PILLOW	7600	5/01/89	—	2.4	2.5	11.6	DOLLARHIDE SM PILLOW	8420	5/01/89	—	24.5	17.0	25.5
ROCK FLAT SUMMIT	5310	5/01/89	—	15.3E	.0	16.9	GRAHAM GUARD STATION	5690	5/01/89	0	.0	.0	6.9
SADDLE MOUNTAIN	7940	4/26/89	56	25.3	22.2	28.6	GRAHAM G.S. PILLOW	5690	5/01/89	—	.0	.0	9.0
SECESH SUMMIT	6520	4/27/89	61	27.6	15.4	34.5	IDAHO CITY TOWNSITE	4000	5/01/89	0	.0	.0	.0
SECESH SUMMIT PILLOW	6520	5/01/89	—	30.0	18.3	34.9	JACKSON PEAK	7070	5/01/89	62	27.6	17.4	31.4
SQUAW MEADOW	5900	4/27/89	55	27.2	11.8	34.8	LAKE FORK	5290	4/27/89	22	10.8	.0	12.7
VIENNA MINE	8960	5/01/89	77	35.7	25.9	39.1	MOORES CREEK SUMMIT	6100	5/01/89	64	30.8	16.7	31.7
VIENNA MINE PILLOW	8960	5/01/89	—	33.0	24.8	40.3	MOORES CK SUM PILLOW	6100	5/01/89	—	33.8	19.6	34.3
WEST BRANCH	5560	5/01/89	21	10.0	.0	18.6	PRAIRIE	4800	5/01/89	—	.0E	.0	.0
WEST BRANCH PILLOW	5560	5/01/89	—	9.9	.0	20.2	PRAIRIE PILLOW	4800	5/01/89	—	.0	.0	.0
							ROAD CREEK	5380	4/27/89	0	.0	.0	.5
							ROCK FLAT SUMMIT	5310	5/01/89	—	15.3E	.0	16.9
							SECESH SUMMIT	6520	4/27/89	61	27.6	15.4	34.5
							SECESH SUMMIT PILLOW	6520	5/01/89	—	30.0	18.3	34.9
							SOLDIER R.S.	5740	4/30/89	0	.0	.0	1.4
							SOLDIER R.S. PILLOW	4330	5/01/89	—	.0	.0	—
							SQUAW FLAT	6240	4/27/89	33	16.0	5.4	21.1
							SQUAW FLAT PILLOW	6240	5/01/89	—	13.1	6.6	19.1
							SQUAW MEADOW	5900	4/27/89	55	27.2	11.8	34.8
							TRINITY MOUNTAIN	7770	4/27/89	85	42.9	25.9	43.7
							TRINITY MTN. PILLOW	7770	5/01/89	—	41.6	26.2	45.4
							TRIPOD SUMMIT	5260	4/26/89	22	10.8	.0	16.6
							VIENNA MINE	8960	5/01/89	77	35.7	25.9	39.1
							VIENNA MINE PILLOW	8960	5/01/89	—	33.0	24.8	40.3
							WEST BRANCH	5560	5/01/89	21	10.0	.0	18.6
							WEST BRANCH PILLOW	5560	5/01/89	—	9.9	.0	20.2

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
BIG WOOD, LITTLE WOOD, BIG LOST, AND LITTLE LOST BASINS							WILLOW, BLACKFOOT, UPPER SNAKE, AND PORTNEUF BASINS						
WATERSHEO V							WATERSHEO VI						
BEAR CANYON	7900	4/27/89	33	12.0	8.0	17.9	ASPEN GROVE	6500	4/28/89	—	.5E	.0	—
BEAR CANYON PILLOW	7900	5/01/89	—	13.2	8.8	17.2	BEAVERDAM CREEK	6120	4/30/89	0	.0	.0	—
COPPER BASIN	7640	4/27/89	0	.0	.0	7.5	BIG SPRINGS	6400	4/27/89	35	15.9	3.6	16.2
COUCH SUMMIT	6840	4/30/89	—	9.6E	.0	14.2	BIRCH CREEK	6800	4/28/89	2	.5	.0	4.4
DOLLARHIDE SUMMIT	8420	4/27/89	61	23.5	16.0	25.0	BLACK BEAR	7950	4/25/89	98	48.1	36.5	44.2
DOLLARHIDE SH PILLOW	8420	5/01/89	—	24.5	17.0	25.5	BLUE LEUGE MINE	6900	5/01/89	—	16.3E	2.3	—
FISHPOLE LAKE	9300	4/27/89	45	18.4	16.2	23.6	BLUE RIDGE	6780	4/28/89	24	10.5	.0	17.4
GALENA	7440	4/27/89	—	9.2E	.0	14.5	BONE	6200	4/28/89	0	.0	.0	1.0
GALENA PILLOW	7440	5/01/89	—	14.2	7.0	20.1	BROCKMAN STATION	6430	4/28/89	0	.0	.0	—
GALENA NEW	7470	4/27/89	40	15.9	7.9	20.7	COULTER CREEK	7020	5/01/89	—	15.5E	—	17.8
GALENA SUMMIT	8780	4/27/89	47	18.3	14.4	25.8	COLD SPRINGS	7000	4/29/89	28	13.4	1.7	—
GALENA SUMMIT PILLOW	8780	5/01/89	—	16.0	11.5	21.2	CRAB CREEK	6860	5/01/89	—	15.0E	1.5	15.7
GARFIELD R.S.	6560	4/27/89	0	.0	.0	2.3	CRAB CREEK PILLOW	6860	5/01/89	—	15.5	1.8	16.2
GARFIELD R.S. PILLOW	6560	5/01/89	—	.0	.0	5.5	EAST CREEK	7000	4/30/89	0	.0	.0	—
GRAHAM RANCH	6270	4/27/89	18	6.8	.0	9.1	FALL CREEK	6820	4/28/89	3	.5	.0	—
HILTS CREEK	8000	4/28/89	26	7.9	5.8	9.3	GRASSY LAKE	7270	4/28/89	72	35.9	23.6	34.9
HILTS CREEK PILLOW	8000	5/01/89	—	9.5	8.7	11.1	GRASSY LAKE PILLOW	7270	5/01/89	—	34.9	23.3	36.4
HYNDMAN CREEK	7440	4/27/89	20	7.0	1.8	10.7	INDIAN MEADOWS	9420	4/28/89	94	40.4	28.9	38.1
HYNDMAN PILLOW	7440	5/01/89	—	6.3	.0	11.1	ISLAND PARK	6290	4/27/89	26	11.0	.0	10.3
LOST-WOOD OVIDE	7900	4/27/89	42	18.1	11.1	22.4	ISLAND PARK PILLOW	6290	5/01/89	—	12.4	.8	14.3
LOST-WOOD OVO PILLOW	7900	5/01/89	—	21.4	10.7	26.3	JACKPINE CREEK	7350	4/28/89	48	19.7	11.9	21.7
MASCOT MINE	7780	5/01/89	—	9.4E	4.7	15.3	LAVA CREEK	7350	4/28/89	22	8.5	1.2	12.1
MOONSHINE	7440	4/27/89	9	2.0	1.4	8.3	LOWER PEBBLE	5780	4/29/89	0	.0	.0	—
MOONSHINE PILLOW	7440	5/01/89	—	3.5	3.0	10.6	MAOISUN PLATEAU	7750	4/25/89	59	28.1	20.0	23.2
MULDOON	6320	4/27/89	0	.0	.0	.5	MC RENOLOS RESERVOIR	6720	4/28/89	27	10.7	.0	16.3
SAWMILL CANYON	7000	4/27/89	0	.0	.0	4.3	MINK CREEK	6410	5/01/89	—	7.8E	.0	13.2
SOLDIER R.S.	5740	4/30/89	0	.0	.0	1.4	MUO CREEK	7100	4/28/89	48	19.3	9.1	16.0
SOLOIER R.S. PILLOW	4330	5/01/89	—	.0	.0	—	NORTH PUTNAM	7240	5/01/89	55	24.8	—	—
STICKNEY MILL	7430	4/27/89	4	1.3	.0	6.0	PACKSADDLE SPRING	8200	4/28/89	72	30.0	22.2	29.0
STICKNEY MILL PILLOW	7430	5/01/89	—	.0	.0	5.4	PEBBLE CREEK	6550	4/29/89	0	.0	.0	—
SWEDE PEAK	7640	4/27/89	25	9.6	3.1	15.6	PHILLIPS BENCH	8200	4/27/89	83	35.7	27.6	31.1
SWEDE PEAK PILLOW	7640	5/01/89	—	10.6	.0	15.0	PHILLIPS BENCH PILL.	8200	5/01/89	—	33.7	23.1	30.2
VIENNA MINE	8960	5/01/89	77	35.7	25.9	39.1	PINE CREEK PASS	6810	5/01/89	16	6.9	5.3	12.7
VIENNA MINE PILLOW	8960	5/01/89	—	33.0	24.8	40.3	PUTNAM	7220	4/30/89	17	6.9	3.1	—
WET CREEK SUMMIT	7680	4/28/89	17	5.2	4.6	7.4	SAWTELL MOUNTAIN	8720	4/27/89	102	43.5	28.8	39.1
							SEOGWICK PEAK	7850	4/30/89	26	12.5	4.7	—
							SHEEP MOUNTAIN	6570	4/28/89	0	.0	.0	9.5
							SHEEP MTN PILLOW	6570	5/01/89	—	.2	.0	10.3
							SLUG CREEK DIVIDE	7230	4/26/89	6	1.8	.9	13.5
							SLUG CK DVO PILLOW	7230	5/01/89	—	3.5	.7	16.4
							SOMSEN RANCH	6840	4/27/89	11	3.4	1.0	12.2
							SOMSEN RANCH PILLOW	6800	5/01/89	—	.0	.0	9.8
							STATE LINE	6660	5/01/89	17	7.1	4.2	9.1
							TETON PASS W.S.	7740	4/28/89	71	29.9	23.2	28.3
							TEX CREEK	6650	5/01/89	—	.0E	.0	—
							TOPONCE	6160	4/30/89	0	.0	.0	—
							TWITCHELL CANYON	6300	5/01/89	0	.0	—	—
							VALLEY VIEW	6680	4/27/89	27	10.1	.5	12.8
							WHISKEY CREEK	6800	4/25/89	44	21.6	10.7	18.7
							WHITE ELEPHANT	7710	4/27/89	68	27.9	16.8	25.3
							WHITE ELEPHANT PILL	7710	5/01/89	—	35.4	20.8	27.2
							WILDHORSE DIVIDE	6490	5/01/89	—	7.0E	.0	12.1
							WILDHORSE DVD PILLOW	6490	5/01/89	—	7.2	.3	10.6
SOUTHSIDE SNAKE BASIN							WATERSHEO VII						
WATERSHEO VIII							GREAT BASIN						
BADGER GULCH	6660	5/01/89	2	2.2	.0	—	CUB RIVER R.S.	5450	4/24/89	0	.0	.0	.4
BEAR CREEK	7800	5/01/89	—	18.9E	11.8	21.5	EMIGRANT SUMMIT	7390	4/27/89	33	13.9	9.0	23.6
BOSTETTER R.S.	7500	5/01/89	29	13.7	8.4	13.5	EMIGRANT SUM PILLOW	7390	5/01/89	—	15.4	9.0	27.3
CEGAR CREEK	6820	4/29/89	0	.0	.0	3.7	EMIGRATION CANYON	6500	4/27/89	0	.0	.0	—
DEADLINE	7400	4/29/89	0	.0	.0	20.3	FRANKLIN BASIN	8020	4/24/89	42	18.5	12.3	20.7
DEADLINE SOUTH	7450	4/29/89	18	7.7	.0	25.1	GIVEOUT	6860	5/01/89	—	.0E	1.4	7.1
GOAT CREEK	8800	4/29/89	51	19.5	16.6	20.9	GIVEOUT PILLOW	6840	5/01/89	—	.0	.0	6.0
HOWELL CANYON	7980	5/01/89	46	21.6	9.7	23.5	GIVEOUT NEW	6930	4/26/89	0	.0	—	4.4
HOWELL CANYON PILLOW	7980	5/01/89	—	18.4	3.7	20.3	LITTLE BEAVER	6790	5/01/89	—	.0E	1.0	9.9
HUNTINGBIRD SPRINGS	8950	4/29/89	—	24.0E	21.6	27.7	LOWER HOME CANYON	7640	4/26/89	—	7.8E	1.4	11.5
LANGFORD FLAT CREEK	5980	4/29/89	0	.0	.0	.9	OXFORD MOUNTAIN	6800	5/01/89	—	.0E	.0	—
MAGIC MOUNTAIN	6880	4/29/89	23	10.7	3.8	18.0	OXFORD SPRING	6740	5/01/89	—	.0E	—	5.8
MAGIC MTN PILLOW	6880	5/01/89	—	6.9	.5	18.0	OXFORD SPRING PILLOW	6740	5/01/89	—	.0	.0	6.7
MUO FLAT	5730	5/01/89	—	.0E	.0	.2	STRAWBERRY CREEK	5820	4/27/89	0	.0	.0	3.2
MUO FLAT PILLOW	5730	5/01/89	—	.0	.0	.0	UPPER HOME CANYON	8560	4/26/89	51	21.0	15.0	23.8
POLE CREEK R.S.	8330	4/29/89	50	20.0	18.8	23.4	WILLOW FLAT	6070	4/24/89	0	.0	.0	5.9
SHOSHONE BASIN	5810	5/01/89	—	.0E	.0	1.0							
SOUTH MOUNTAIN	6500	4/29/89	14	5.5	.0	8.2							
SOUTH MTN PILLOW	6500	5/01/89	—	5.9	.0	7.2							
WILSON CREEK	7500	4/29/89	18	6.8	.0	7.8							

The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State	Idaho Department of Water Resources Soil and Water Conservation Districts of Idaho
Federal	U.S. Department of Agriculture Forest Service U.S. Department of Army Corps of Engineers U.S. Department of Commerce NOAA, National Weather Service U.S. Department of Interior Bureau of Reclamation Geological Survey, Water Resources Division Shoshone-Bannock Tribal Council
Local	Big Lost River Irrigation District Big Wood Irrigation Company Boise Project Board of Control Idaho Water District #01 Lewiston Orchards Irrigation District Little Wood River Irrigation District North Board of Control — Owyhee Project Salmon Falls Irrigation Company South Board of Control — Owyhee Project
Private	Cyprus Mining Company FMC Corporation Idaho Power Company Le Bois Resort Washington Water Power Company

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

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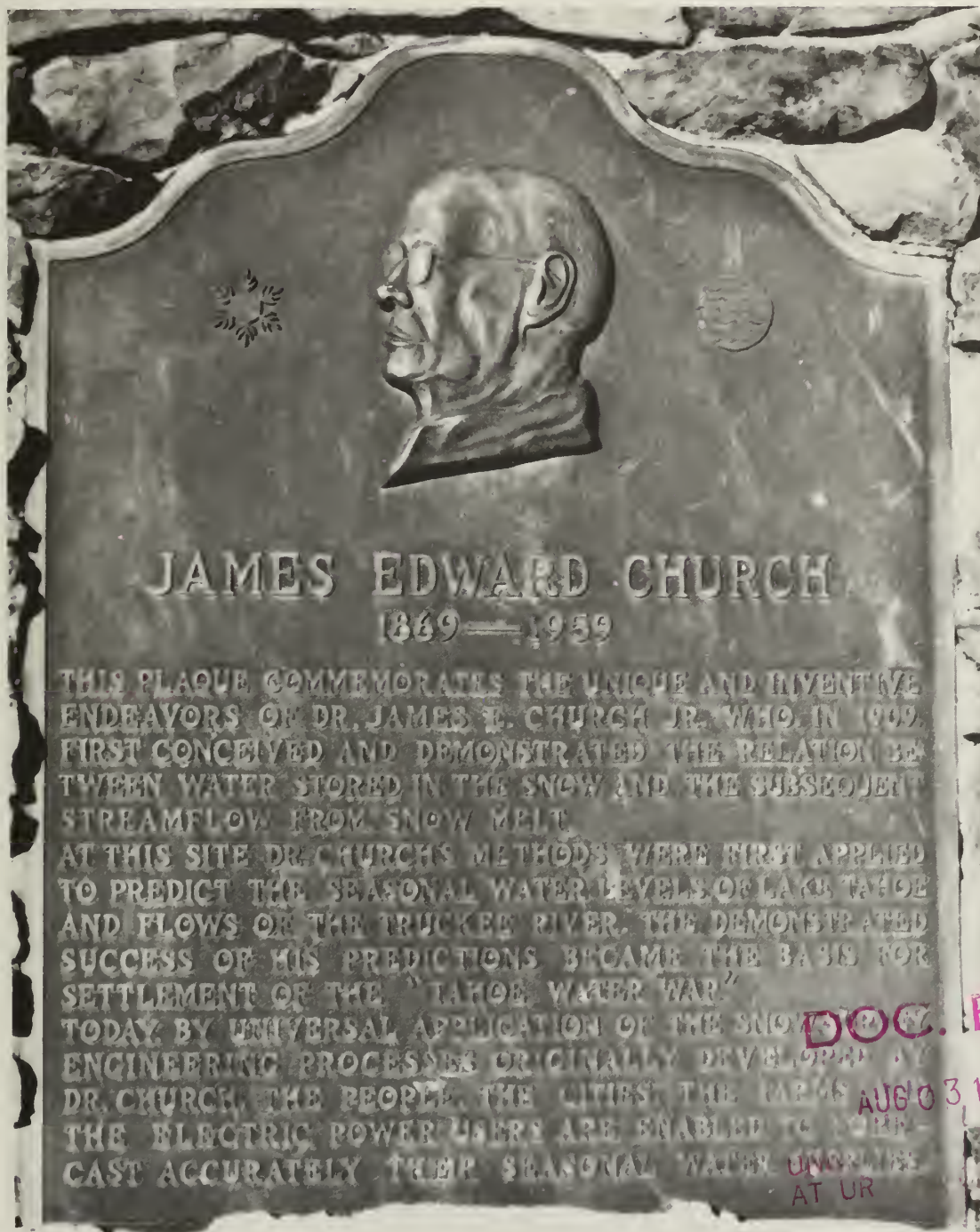
Soil
Conservation
Service

Boise,
Idaho



Idaho Water Supply Outlook

June 1, 1989



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Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Soil Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

An error is associated with each forecast, and this error decreases as the season progresses and more data becomes available. To express the range of error that can be expected, "most probable" forecasts are issued along with a range representing a "reasonable minimum" and a "reasonable maximum". Actual streamflow can be expected to fall within this range in eight out of ten years. Additionally two specific scenarios are provided based on the assumption that subsequent precipitation will be "wet", above average, or "dry", below average.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola Ave., Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Building A, 3rd floor, Denver, CO 80211
Idaho	3244 Elder Street, Room 124, Boise, ID 83705
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 87102-3157
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97204
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	W. 920 Riverside, Room 360, Spokane, WA 99201-1080
Wyoming	Federal Building, 100 "B" Street, Room 3124, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209-3489.

Water supply reports published by other agencies:

California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Idaho Water Supply Outlook

and

Federal — State — Private Cooperative Snow Surveys

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COVER: This plaque on the outlet gate at Lake Tahoe, Nevada,
commemorates the start of snow surveys in 1909.

"Programs and assistance of the United States Department of Agriculture are
available without regard to race, creed, color, sex, age, or national origin."

GENERAL OUTLOOK

SUMMARY:

MAY BROUGHT COOLER TEMPERATURES, WHICH CONTRIBUTED TO THE SLOWER THAN NORMAL SNOWMELT AND BELOW TO WELL BELOW NORMAL FLOWS ON IDAHO RIVERS. WITH MOST STREAMS HAVING REACHED THEIR PEAK FLOWS BETWEEN MID-APRIL AND MID-MAY, LOW FLOW CONDITIONS MAY OCCUR EARLIER THAN NORMAL. AS THE 1989 SNOW SEASON COMES TO AN END AND THE IRRIGATION SEASON KICKS INTO FULL SWING, MINOR SHORTAGES COULD OCCUR IN SOUTH CENTRAL AND SOUTHEASTERN IDAHO ON THE MAGIC, SALMON FALLS, AND OAKLEY RESERVOIR SYSTEMS, AS WELL AS THE GREAT BASIN AREA. OTHER USERS CAN EXPECT ADEQUATE WATER SUPPLIES AS MOST RESERVOIRS HAVE NEAR AVERAGE STORAGE LEVELS.

SNOWPACK:

Cool temperatures during May reversed the early snowmelt trend established during March and April, and snowmelt during the month proceeded at a much slower rate than normal. Snow measurements taken at a limited number of stations near June 1 show most of the snowpack below 5,000 ft. elevation in northern Idaho is now depleted. Stations above this elevation generally report 70-100% of normal snowpack remaining. In the central part of the state, broken snowpacks remain between 6,000 and 8,000 feet on north facing slopes and protected areas. Higher elevations report 60-90% of normal snowpacks remaining. Southern and eastern Idaho snowpacks are nearly depleted, with only scattered patches of snow remaining above 7,000 ft. The Upper Snake River basin in western Wyoming reports near average snowpacks remaining above 7,500 feet.

PRECIPITATION:

May brought a mixed weather pattern to Idaho: the northern portion of the state received above normal rainfall with near normal temperatures, while the southern two-thirds of the state was dry and cool. Lewiston, with 182% of normal precipitation, was the highest in the state, with Kellogg close behind at 154%. Grangeville, Salmon, and Ketchum were near the dividing line between wet and dry conditions, and were slightly above normal. Most southern Idaho stations reported only 50 to 75% of normal, with Boise having the lowest rainfall with just 17% of average. The state as a whole received 100% of normal rainfall for the month of May.

RESERVOIRS:

June 1 storage levels range from a low of 56% of average (31% of capacity) in Oakley Reservoir to 125% of average (92% of capacity) in Lucky Peak Reservoir, with a majority of reservoirs reporting between 80 and 110% of average storage. Twenty-six key reservoirs across the state report a combined storage of 100% of average and 84% of capacity. The lowest storage levels are found in the south central and southeastern parts of the state, where most systems report between 60 and 85% of normal storage.

STREAMFLOW:

Most streams in Idaho reached their peak flow condition about a month earlier than normal, with most of the peaks occurring between mid-April and mid-May. One exception is the Owyhee River, which peaked in early March. With warm temperatures returning to the Gem state in the first week of June, most northern and central Idaho rivers produced one last push before beginning the recession to summer flow conditions. May streamflow volumes were generally below to well below normal throughout much of the state. Flows on the Clearwater and Salmon River in the northern part of the state were in the 70-85% of average range. Central Idaho reported similar streamflow volumes for May in the higher elevation basins, while lower elevation basins produced only about half their normal volumes. In the Upper Snake basin, streamflows were near to above normal in the higher basins, with the Henrys Fork near Ashton and the Snake at Moran reporting 99% and 143% of average flows, respectively, for May. The lower elevation tributaries, however, produced below to well below normal flows. Flows in the Bear River basin were also well below normal for the month. In general, water supplies should be good in basins with large storage facilities and adequate to meet user needs on smaller systems. Minor shortages could occur on the Magic, Salmon Falls, and Oakley reservoir systems. Water users depending on unregulated natural streamflows across southern Idaho can expect low flows in mid and late summer due to the early runoff and dry spring conditions. The worst water supply conditions are found on the Bear River drainage, where current reservoir and streamflow levels indicate the summer water supplies will be very short.

RECREATIONAL OUTLOOK:

After a prolonged cool spring, recreational boaters can look forward to warm summer temperatures and slowly receding streamflows as the last of the mountain snowpack is depleted in early June. The low snowmelt rates of May will help extend the boating season on most north and central Idaho rivers into the summer. In spite of a near normal snowpack, high peak flows were not experienced on most rivers due to the slow, extended nature of the snow melt season. However, adequate streamflows for river running will persist well into the summer for the major recreational rivers of central and northern Idaho.

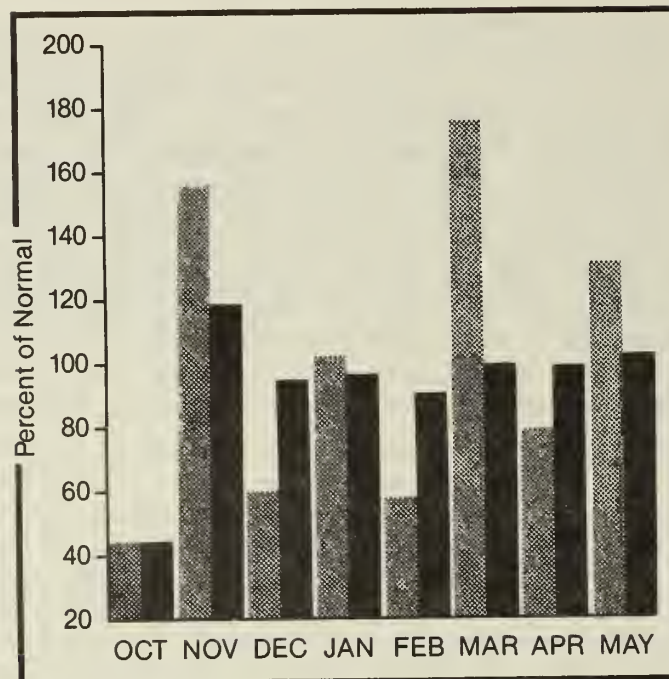
NOTICE TO SUBSCRIBERS:

Last month we reported that a recent evaluation of the Water Supply Outlook Report indicated we were producing a report that was not meeting the needs of many users. As a result, this summer and fall will be spent developing new snow survey and water supply data dissemination procedures and a new format for the Water Supply Outlook Report. You will be informed of the changes, and will receive a subscription notice for the new report prior to next season. If you have any questions or comments, contact your local SCS office or this office.

SCS - Snow Surveys
3244 Elder Street, Rm 124
Boise, Idaho 83705
(208) 334-1614

Upper Columbia Basin

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

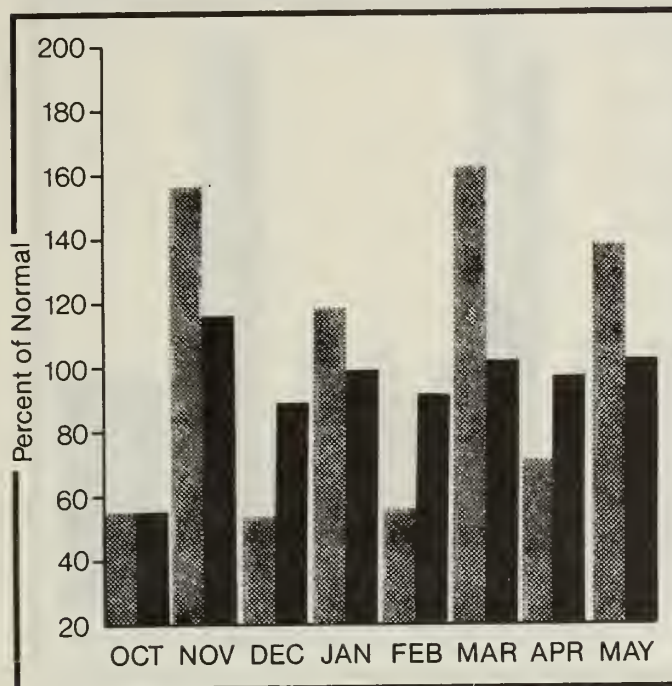
RESERVOIR STORAGE

(1000AF)

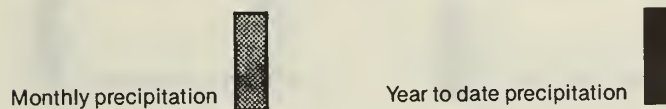
RESERVOIR	USEABLE I CAPACITY I	** USEABLE STORAGE **		
		THIS YEAR	LAST YEAR	AVG.
HUNGRY HORSE	3451.0	2281.0	1630.0	2663.0
FLATHEAD LAKE	1791.0	1509.0	1480.0	1468.0
PEND OREILLE	1561.2	1316.9	1262.3	1278.5
NOXON RAPIDS	335.0	315.1	321.6	270.4
COEUR D'ALENE	291.2	278.2	282.2	353.9
PRIEST LAKE	97.7	95.8	105.8	123.5

Clearwater River Basin

Precipitation* (percent of normal)



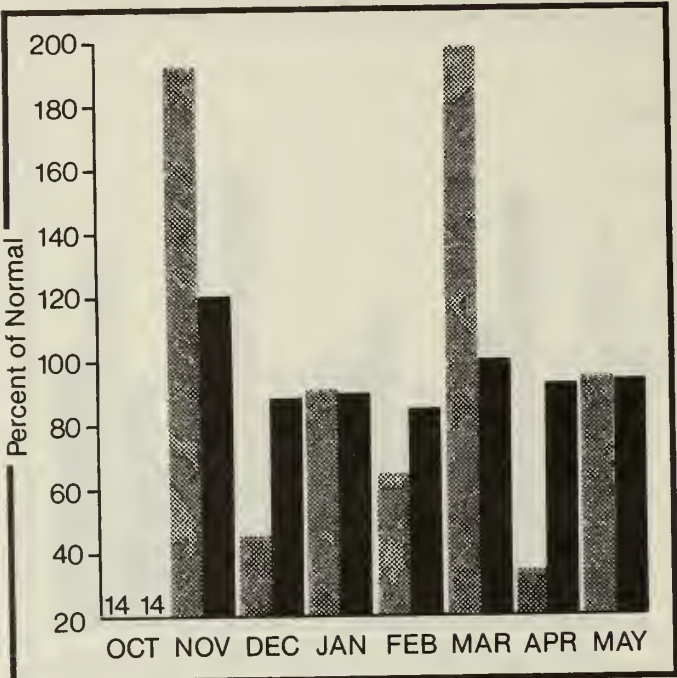
*Based on selected stations



RESERVOIR STORAGE (1000AF)				
RESERVOIR	USEABLE CAPACITY	THIS YEAR	** USEABLE STORAGE ** LAST YEAR	AVG.
DWORSHAK	3467.8	3238.2	2763.6	2987.3

Salmon River Basin

Precipitation* (percent of normal)

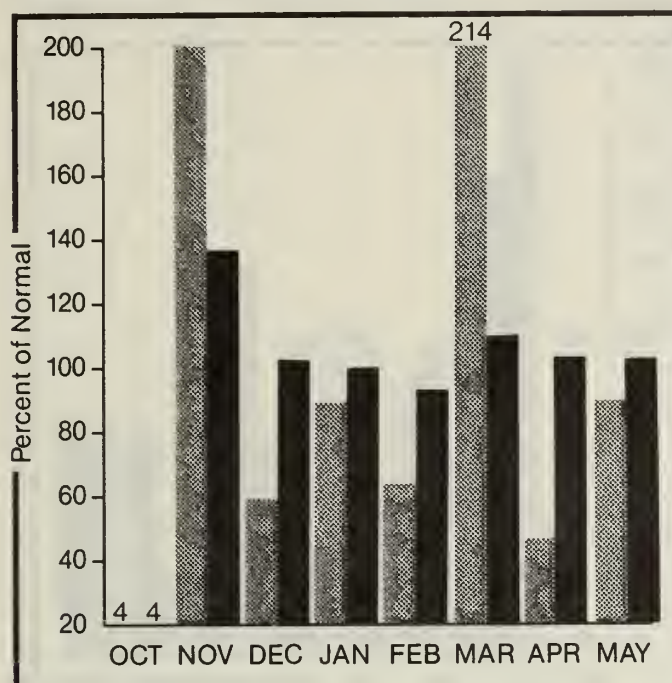


*Based on selected stations

Monthly precipitation Year to date precipitation

Weiser, Payette, and Boise River Basin

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

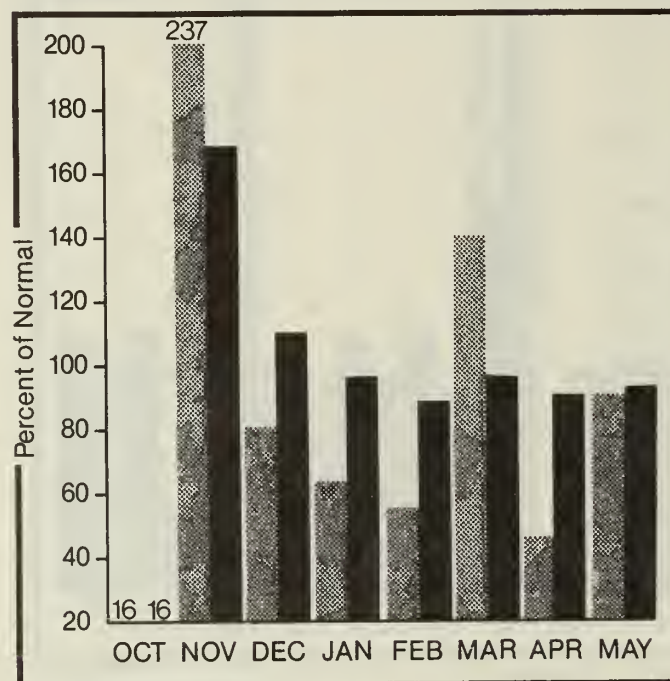
Year to date precipitation

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **		
		THIS YEAR	LAST YEAR	AVG.
MANN CREEK	11.3	11.4	7.3	10.8
CASCADE	703.2	639.6	541.8	548.7
DEADWOOD	162.0	136.2	122.0	136.2
ANDERSON RANCH	464.2	395.4	241.1	413.3
ARROWROCK	286.6	186.6	66.1	216.3
LUCKY PEAK	307.0	282.1	294.4	225.9
LAKE LOWELL (DEER FLAT)	177.0	133.7	110.0	159.0

Big Wood, Little Wood, Big Lost, and Little Lost River Basin

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

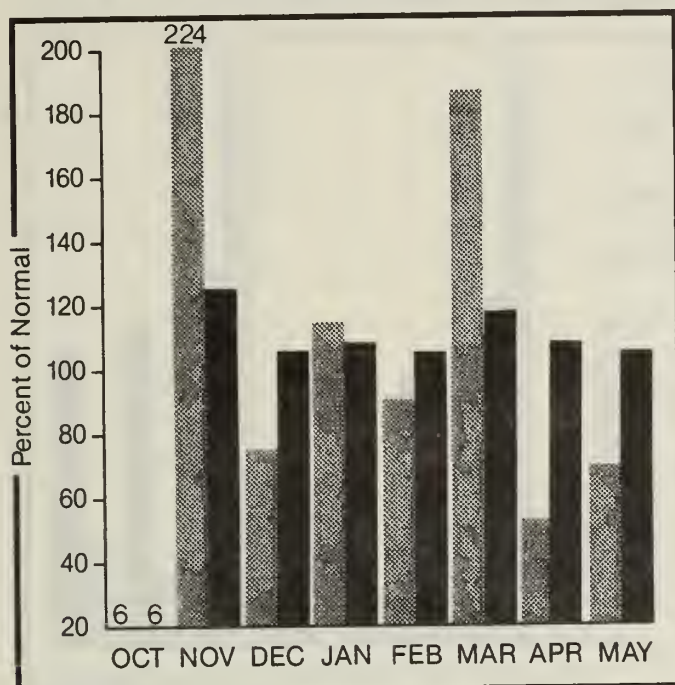
RESERVOIR STORAGE

(1000AF)

RESERVOIR	USEABLE I CAPACITY I	** USEABLE STORAGE **		
		THIS YEAR	LAST YEAR	AVG.
MAGIC	191.5	147.9	27.4	173.8
LITTLE WOOD	30.0	29.3	24.7	28.0
CAREY VALLEY		NO REPORT		
MACKAY	44.5	26.2	27.7	33.6

Willow Creek, Blackfoot, Upper Snake, and Portneuf River Basin

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

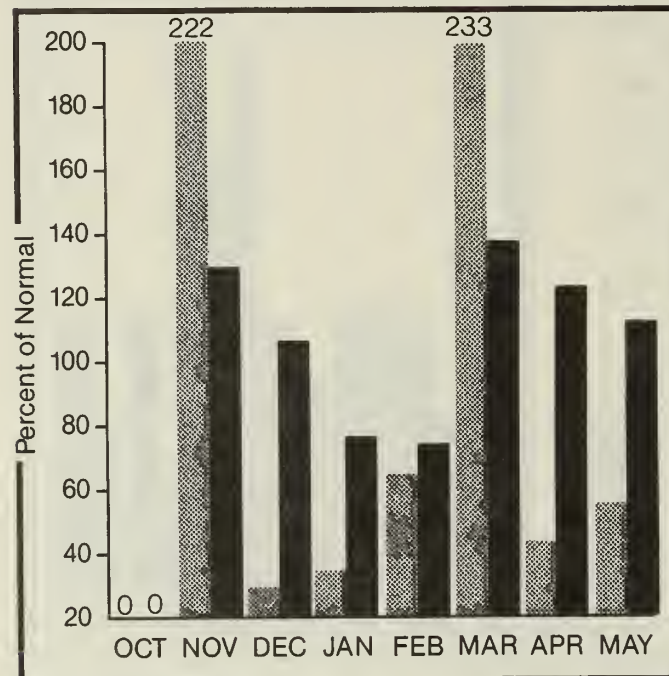
RESERVOIR STORAGE

(1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **		
		THIS YEAR	LAST YEAR	AVG.
ISLAND PARK	127.6	134.9	134.0	124.4
GRASSY LAKE	15.2	14.3	13.3	13.5
JACKSON LAKE	824.7	530.2	271.9	567.9
PALISADES	1357.0	1045.2	1277.4	993.9
AMERICAN FALLS	1700.0	1553.1	1276.3	1519.3
BROWNLEE	975.3	781.3	884.3	756.8
BLACKFOOT	348.7	218.3	269.6	309.5
HENRY'S LAKE	90.4	76.8	87.1	84.6
RIRIE	96.5	86.7	68.9	83.9

Southside Snake River Basin

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

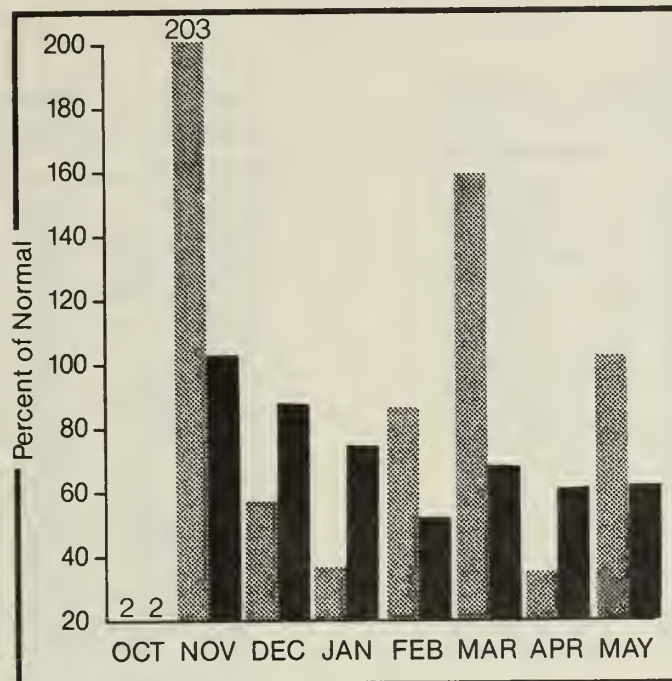
RESERVOIR STORAGE

(1000AF)

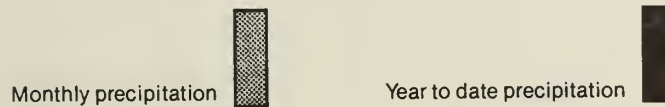
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **		
		THIS YEAR	LAST YEAR	AVG.
OAKLEY	77.4	24.0	18.2	42.7
SALMON FALLS	182.6	73.1	61.8	94.9
OWYHEE	715.0	683.8	225.5	599.6

Great Basin

Precipitation* (percent of normal)



*Based on selected stations



RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **		
		THIS YEAR	LAST YEAR	AVG.
BEAR LAKE	1421.0	920.0	1160.2	1145.5
MONTPELIER CREEK	4.0	2.7	2.9	3.4

SNOW DATA MEASUREMENTS

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
UPPER COLUMBIA BASIN						
WATERSHED I						
BREEZY SADDLE	5010	5/26/89	0	.0	.0	—
GRANITE PEAK	6000	5/26/89	52	22.9	16.5	30.3
HUMBOLDT GLCH PILLOW	4250	6/01/89	—	.0	.0	.0
LOOKOUT	5140	5/30/89	6	3.6	.0	12.1
LOOKOUT PILLOW	5140	6/01/89	—	.6	.0	12.4
LOST LAKE	6110	5/26/89	79	37.5	23.1	44.7
LOST LAKE PILLOW	6110	6/01/89	—	42.4	—	50.2
MOSQUITO RIDGE	5200	6/01/89	—	11.5E	.0	1.3
MOSQUITO PILLOW	5200	6/01/89	—	11.0	.0	16.2
SCHWEITZER BASIN	6090	6/01/89	44	28.0	16.1	25.1
SCHWEITZER BOWL	4800	5/31/89	0	.0	.0	2.4
SCHWEITZER RIDGE	6200	5/31/89	30	16.2	7.5	30.0
SHERWIN PILLOW	3200	6/01/89	—	.0	.0	.0
SUNSET	5540	6/01/89	—	18.3E	10.5	18.1
SUNSET PILLOW	5540	6/01/89	—	20.3	10.3	19.7

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
CLEARWATER BASIN						
WATERSHED II						
BREEZY SADDLE	5010	5/26/89	0	.0	.0	—
COOL CREEK	6250	5/26/89	92	40.1	26.8	32.2
COOL CREEK PILLOW	6280	6/01/89	—	38.8	—	33.3
COOLWATER MOUNTAIN	6030	5/26/89	65	30.2	11.7	17.6
CRATER MEADOWS	5960	5/26/89	56	30.6	15.5	31.0
CRATER MDWS PILLOW	5960	6/01/89	—	25.7	6.5	34.0
ELK BUTTE	5550	6/01/89	—	7.7E	.0	9.8
ELK BUTTE PILLOW	5550	6/01/89	—	17.2	.8	22.1
GUAT LAKE	6500	5/26/89	68	32.4	28.2	36.5
GRANITE PEAK	6000	5/26/89	52	22.9	16.5	30.3
HEMLOCK BUTTE	5810	5/26/89	58	28.0	4.8	29.6
HEMLOCK BUTTE PILLOW	5810	6/01/89	—	30.2	7.6	31.8
HOODOO BASIN PILLOW	6050	6/01/89	—	29.5	20.2	30.7
HOODOO CREEK	5900	5/26/89	44	20.7	20.8	34.7
LOLO PASS	5240	6/01/89	—	.0E	.4	.0
LOLO PASS PILLOW	5240	6/01/89	—	1.1	.6	.0
LOST LAKE	6110	5/26/89	79	37.5	23.1	44.7
LOST LAKE PILLOW	6110	6/01/89	—	42.4	—	50.2
MOUNTAIN MEADOWS	6360	6/01/89	—	8.6E	1.1	9.5
MOUNTAIN MDWS PILLOW	6360	6/01/89	—	13.6	7.9	14.4
NEZ PERCE PASS	6570	5/26/89	0	.0	.4	—
SAVAGE PASS	6170	6/01/89	—	10.3E	3.6	17.4
SAVAGE PASS PILLOW	6170	6/01/89	—	10.7	3.9	18.0
SHANGHAI SUMMIT	4570	5/26/89	0	.0	.0	.0
SHANGHAI SUM PILLOW	4570	6/01/89	—	.0	.0	.0
SHERWIN PILLOW	3200	6/01/89	—	.0	.0	.0

SALMON BASIN						
WATERSHED III						
BANNER SUMMIT	7040	5/31/89	16	7.3	.6	11.6
BANNER SUMMIT PILLOW	7040	6/01/89	—	5.2	.5	11.2
BEAR BASIN PILLOW	5350	6/01/89	—	.0	.0	.0
BIG CREEK SUMMIT	6580	5/28/89	36	19.1	3.5	19.7
BIG CREEK SUM PILLOW	6580	6/01/89	—	13.6	1.6	18.7
DEADWOOD SUMMIT	6860	5/31/89	33	18.2	4.8	24.8
GALENA SUMMIT	8780	5/31/89	9	4.2	1.5	13.5
GALENA SUMMIT PILLOW	8780	6/01/89	—	.0	.9	11.6
GIBBONS PASS	7100	6/02/89	5	2.7	1.2	9.8
MEADOW LAKE	9150	6/01/89	—	2.1E	—	13.2
MEADOW LAKE PILLOW	9150	6/01/89	—	2.0	.3	13.3
MILL CREEK SUMMIT	8800	6/01/89	—	5.5E	6.1	13.5
MILL CREEK ST PILLOW	8800	6/01/89	—	5.2	5.9	12.7
MOONSHINE	7440	6/01/89	—	.0E	.0	.0
MOONSHINE PILLOW	7440	6/01/89	—	.0	.0	.0
MOOSE CREEK	6200	6/01/89	—	.0E	.0	.0
MOOSE CR PILLOW	6200	6/01/89	—	.0	.0	.0
MORGAN CREEK	7600	6/01/89	—	.0E	1.3	.0
MORGAN CREEK PILLOW	7600	6/01/89	—	.0	1.3	.0
ROCK FLAT SUMMIT	5310	6/01/89	—	.0E	—	—
SECESH SUMMIT	6520	5/28/89	16	8.4	.0	13.3
SECESH SUMMIT PILLOW	6520	6/01/89	—	12.7	.0	16.0
SQUAW MEADOW	5900	5/28/89	10	5.3	.0	10.9
VIENNA MINE	8960	5/31/89	46	24.2	6.8	28.7
VIENNA MINE PILLOW	8960	6/01/89	—	18.6	10.9	30.1
WEST BRANCH	5560	6/01/89	—	.0E	.0	.0
WEST BRANCH PILLOW	5560	6/01/89	—	.0	.0	.0

WEISER, PAYETTE, AND BOISE BASINS						
WATERSHED IV						
ATLANTA SUMMIT	7600	5/31/89	35	18.2	7.1	20.8
ATLANTA SUM PILLOW	7580	6/01/89	—	12.5	2.1	19.7
ATLANTA TOWNSITE	5370	5/31/89	0	.0	.0	—
BANNER SUMMIT	7040	5/31/89	16	7.3	.6	11.6
BANNER SUMMIT PILLOW	7040	6/01/89	—	5.2	.5	11.2
BEAR BASIN PILLOW	5350	6/01/89	—	.0	.0	.0
BEAR SADDLE	6180	6/01/89	—	.0E	—	.0
BEAR SADDLE PILLOW	6180	6/01/89	—	.0	.0	.0
BIG CREEK SUMMIT	6580	5/28/89	36	19.1	3.5	19.7
BIG CREEK SUM PILLOW	6580	6/01/89	—	13.6	1.6	18.7
BOGUS BASIN	6340	5/31/89	0	.0	.0	3.9
BRUNDAGE RESV PILLOW	4500	6/01/89	—	.7	.1	—
COZY COVE	5380	5/31/89	0	.0	.0	.3
COZY COVE PILLOW	5380	6/01/89	—	.0	—	—
DEADWOOD AIRSTRIP	5360	6/01/89	—	.0E	.0	—
DEADWOOD SUMMIT	6860	5/31/89	33	18.2	4.8	24.8
DOLLARHIDE SUMMIT	8420	5/31/89	27	12.6	1.5	15.3
DOLLARHIDE SM PILLOW	8420	6/01/89	—	14.9	—	18.4
GRAHAM GUARD STATION	5690	5/31/89	0	.0	.0	.0
GRAHAM G.S. PILLOW	5690	6/01/89	—	.0	.0	.0
JACKSON PEAK	7070	5/31/89	19	10.0	1.1	11.5
LAKE FORK	5290	5/28/89	0	.0	.0	.3
MOORES CREEK SUMMIT	6100	5/31/89	13	7.4	.0	11.7
MOORES CK SUM PILLOW	6100	6/01/89	—	5.4	.0	12.3
PRAIRIE PILLOW	4800	6/01/89	—	.0	.0	.0
ROCK FLAT SUMMIT	5310	6/01/89	—	.0E	—	—
SECESH SUMMIT	6520	5/28/89	16	8.4	.0	13.3
SECESH SUMMIT PILLOW	6520	6/01/89	—	12.7	.0	16.0
SOLDIER R.S.	5740	6/01/89	—	.0E	.0	.0
SOLDIER R.S. PILLOW	4330	6/01/89	—	.0	.0	.0
SQUAW FLAT	6240	6/01/89	—	.0E	.0	.0
SQUAW FLAT PILLOW	6240	6/01/89	—	.0	.0	.0
SQUAW MEADOW	5900	5/28/89	10	5.3	.0	10.9
TRINITY MOUNTAIN	7770	5/31/89	40	21.5	5.4	26.6
TRINITY MTN. PILLOW	7770	6/01/89	—	25.4	9.6	29.7
VIENNA MINE	8960	5/31/89	46	24.2	6.8	28.7
VIENNA MINE PILLOW	8960	6/01/89	—	18.6	10.9	30.1
WEST BRANCH	5560	6/01/89	—	.0E	.0	.0
WEST BRANCH PILLOW	5560	6/01/89	—	.0	.0	.0

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
MOD, LITTLE WOOD, BIG LOST, AND LITTLE LOST BASINS WATERSHED V						
EAR CANYON	7900	5/31/89	0	.0	—	.0
EAR CANYON PILLOW	7900	6/01/89	—	.0	.0	.0
OPPER BASIN	7640	5/31/89	0	.0	—	—
OLLARHIDE SUMMIT	8420	5/31/89	27	12.6	1.5	15.3
OLLARHIDE SM PILLOW	8420	6/01/89	—	14.9	—	18.4
ALENA	7440	6/01/89	—	.0E	.0	1.3
ALENA PILLOW	7440	6/01/89	—	.0	.1	7.5
ALENA NEW	7470	5/31/89	2	.9	.0	7.5
ALENA SUMMIT	8780	5/31/89	9	4.2	1.5	13.5
ALENA SUMMIT PILLOW	8780	6/01/89	—	.0	.9	11.6
ARFIELD R.S.	6560	5/31/89	0	.0	.0	.0
ARFIELD R.S. PILLOW	6560	6/01/89	—	.0	.0	.0
RAHAM RANCH	6270	5/31/89	0	.0	—	—
LTIS CREEK	8000	6/01/89	—	.0E	.0	.0
LTIS CREEK PILLOW	8000	6/01/89	—	.0	.0	.0
NDMAN CREEK	7440	5/31/89	0	.0	.0	.0
OST-WOOD DIVIDE	7900	5/31/89	0	.0	—	5.6
OST-WOOD DVD PILLOW	7900	6/01/89	—	.1	.0	7.7
ASCOT MINE	7780	6/01/89	—	.0E	—	1.2
ONSHINE	7440	6/01/89	—	.0E	.0	.0
ONSHINE PILLOW	7440	6/01/89	—	.0	.0	.0
OLDOON	6320	5/31/89	0	.0	.0	—
OLDIER R.S.	5740	6/01/89	—	.0E	.0	.0
OLDIER R.S. PILLOW	4330	6/01/89	—	.0	.0	—
PICKNEY MILL	7430	5/31/89	0	.0	.0	.0
PICKNEY MILL PILLOW	7430	6/01/89	—	.0	.0	.0
WEDE PEAK	7640	5/31/89	0	.0	.0	1.3
WEDE PEAK PILLOW	7640	6/01/89	—	.0	.1	.0
WENNA MINE	8960	5/31/89	46	24.2	6.8	28.7
WENNA MINE PILLOW	8960	6/01/89	—	18.6	10.9	30.1

SIDE SNAKE BASIN WATERSHED VII						
BEAR CK SNOTEL	7800	6/01/89	—	.0	2.6	13.2
BOSTETTER R.S.	7500	6/01/89	—	.0E	.0	.0
BOSTETTER RS PILLOW	7500	6/01/89	—	.0	.0	.0
HOWELL CANYON	7980	6/01/89	—	.0E	.0	.0
HOWELL CANYON PILLOW	7980	6/01/89	—	.0	.0	.0
MAGIC MOUNTAIN	6880	6/01/89	—	.0E	1.7	.0
MAGIC MTN PILLOW	6880	6/01/89	—	.0	1.8	.0
MUD FLAT	5730	6/01/89	—	.0E	.0	.0
MUD FLAT PILLOW	5730	6/01/89	—	.0	.0	.0
SOUTH MTN	6500	6/01/89	—	.0	.0	.0

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
WILLOW, BLACKFOOT, UPPER SNAKE, AND PORTNEUF BASINS WATERSHED VI						
ASPEN GROVE	6500	6/01/89	—	.0E	—	1.3
BIRCH CREEK	6800	6/01/89	—	.0E	.0	—
BLUE LEDGE MINE	6900	6/01/89	—	.0E	.0	—
BONE	6200	6/01/89	—	.0E	.0	—
BROCKMAN STATION	6430	6/01/89	—	.0E	.0	—
CRAB CREEK	6860	6/01/89	—	.0E	.0	.0
CRAB CREEK PILLOW	6860	6/01/89	—	.0	.0	.0
FALL CREEK	6820	6/01/89	—	.0E	.0	—
GRASSY LAKE	7270	6/01/89	5	2.6	.0	15.4
GRASSY LAKE PILLOW	7270	6/01/89	—	12.3	.0	16.1
ISLAND PARK PILLOW	6290	6/01/89	—	.0	.0	.0
MC RENOLDS RESERVOIR	6720	6/01/89	—	.0E	.0	—
MINK CREEK	6410	6/01/89	—	.0E	—	.0
PHILLIPS BENCH	8200	6/01/89	—	18.1E	11.1	19.9
PHILLIPS BENCH PILL.	8200	6/01/89	—	12.1	—	15.1
PINE CREEK PASS	6810	6/01/89	0	.0	.0	1.7
SHEEP MOUNTAIN	6570	6/01/89	—	.0E	.0	.0
SHEEP MTN PILLOW	6570	6/01/89	—	.0	.0	.0
SLUG CREEK DIVIDE	7230	6/01/89	—	.0E	.0	.0
SLUG CK DVD PILLOW	7230	6/01/89	—	.0	.0	.0
SOMSEN RANCH	6840	6/01/89	—	.0E	.0	.0
SOMSEN RANCH PILLOW	6800	6/01/89	—	.0	.0	.0
STATE LINE	6660	5/30/89	0	.0	.0	—
TEX CREEK	6650	6/01/89	—	.0E	—	—
WHITE ELEPHANT PILL	7710	6/01/89	—	9.1	.0	17.0
WILDHORSE DIVIDE	6490	6/01/89	—	.0E	.0	.0
WILDHORSE DVD PILLOW	6490	6/01/89	—	.0	.0	.0

GREAT BASIN WATERSHED VIII						
EMIGRANT SUMMIT	7390	6/01/89	—	.0E	.0	8.9
EMIGRANT SUM PILLOW	7390	6/01/89	—	.0	.0	15.0
GIVEOUT PILLOW	6840	6/01/89	—	.0	.0	.0
OXFORD SPRING PILLOW	6740	6/01/89	—	.0	.0	.0

The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State

Idaho Department of Water Resources
Soil and Water Conservation Districts of Idaho

Federal

U.S. Department of Agriculture
Forest Service
U.S. Department of Army
Corps of Engineers
U.S. Department of Commerce
NOAA, National Weather Service
U.S. Department of Interior
Bureau of Reclamation
Geological Survey, Water Resources Division
Shoshone-Bannock Tribal Council

Local

Big Lost River Irrigation District
Big Wood Irrigation Company
Boise Project Board of Control
Idaho Water District #01
Lewiston Orchards Irrigation District
Little Wood River Irrigation District
North Board of Control — Owyhee Project
Salmon Falls Irrigation Company
South Board of Control — Owyhee Project

Private

Cyprus Mining Company
FMC Corporation
Idaho Power Company
Le Bois Resort
Washington Water Power Company

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

ROOM 124

3244 ELDER STREET
BOISE, IDAHO 83705

OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE, \$300

THIRD CLASS BULK RATE
POSTAGE AND FEES PAID
USDA - SCS
PERMIT NO. G-267

THIRD CLASS MAIL

**Idaho
Water Supply Outlook**

and

Federal — State — Private
Cooperative Snow Surveys



SOIL CONSERVATION SERVICE

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